

Calibration Information for the Upward-Looking Infrared Spectrometer (ULIS) and Downward-Looking Infrared Spectrometer (DLIS)

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1. General Information

The infrared spectrometer in the Descent Imager/Spectral Radiometer (DISR) instrument contains a small grating spectrometer and a pair of linear array detectors. Optical fibers are used to feed light from upward-looking and downward-looking foreoptics to two locations along the input slit of the grating spectrometer. The array detectors contain 150 elements each. The first two elements are not used. The next 5 detector elements are covered by an opaque mask to provide some information of the dark current of the instrument at the temperature of operation. The next two elements form a transition from the opaque mask to a transparent region. The next 132 elements are the active detector elements of the instrument. The last two elements are used to determine the zero level of the signal, and the 5 elements before have the opaque mask, with the two before forming a transition region.

A mechanical shutter in front of the entrance slit of the spectrometer is closed to measure the thermally generated dark current from the detector. The measurements with the shutter closed and with the shutter open are both transmitted to the ground. The integration time and the shutter period are both controlled by auto-exposure algorithms in the instrument.

In order to interpret the data from the IR spectrometer several parameters from the calibration of the instrument are required. These include the wavelength calibration of the ULIS and DLIS as functions of the temperature of the optics, the spectral resolution of the ULIS and DLIS spectrometers as functions of optics temperature and wavelength, the absolute responsivity of the ULIS and DLIS instruments as functions of the temperature of the detector arrays, and the relative sensitivity of the instrument across the fields of view of the ULIS and DLIS. These parameters are provided in tables and functions given below.

A few other pieces of information are required to reduce the data from raw DN to reduced absolutely calibrated average intensity over the field of view of the instrument. The data are almost always taken in sets of two, one set with the shutter open and the other with the shutter closed. The charge from the IR detector pixels are read out by two linear rows of CCD detectors. At the beginning of an exposure, the wells of the detector pixels are filled with charge from the CCD. As the exposure continues, charge is drained from the detector wells at a rate that is proportional to the light level and the thermally generated “dark current”. At the end of the exposure, the exposure level is read by recording the amount of charge from the CCD that is required to refill the wells of the detectors. The signal is the difference between the “precharge” initially placed in the pixels and the amount of charge remaining. This value is given by the difference in DN between the pixels that record the precharge (pixels 148 and 149) and the DN in a given active pixel in the array. Finally, the leads from the detector pixels from the odd numbered and even numbered pixels lead to two separate

CCD detectors. Thus, the signal from an even numbered pixel, i , is given by $DN(148)-DN(i)$, and the signal from an odd numbered pixel is given by $DN(149)-DN(i)$. The net signal is $(DN(\text{precharge pixel})-DN(i))$ with shutter open – $(DN(\text{precharge pixel})-DN(i))$ with the shutter closed. The net count rate is this quantity divided by the average exposure time (equal to the “sample time”) in the raw data. This is the quantity that is proportional to the radiant power on a detector element.

We planned for the operation of the IR spectrometer to be synchronized with the rotation of the probe as determined by our sun sensor system. The total integration time would be one minute or an integer number of rotations of the probe. The data collected by the instrument was divided into 8 bins in azimuth for the DLVS and 4 bins in azimuth for the ULVS. Unfortunately, as the probe swung under the parachute a several times the maximum rate specified for the mission, the sun sensor system was not able to determine the rotation rate accurately at all times during the mission. The result is that the boundaries of the azimuth bins actual drifted in azimuth during the integration. Fortunately, the housekeeping data recorded by the IR spectrometer permits the exact times when the shutter was open and the instrument collected a sample to be reconstructed. This means that for each cycle of operation of the IR spectrometer we have a table of the times at which data were collected in each of the azimuth bins. Combined with a model of azimuth as a function of mission time determined by other means, we have produced a table of azimuths at which data were collected in each cycle of the IR spectrometer. The relative weights of each of these samples are also known, as the integration times sometimes varied during single cycles. This auxiliary information is necessary of one wants to compare the measurements with the signal levels that the machine would have measured for a radiative transfer model.

One final complication is necessary for the reduction of the ULIS measurements to the spectrum of the average intensity in the field of view. For the ULIS it has been noted in calibration measurements that a weak pattern of fringes (of a few percent amplitude) is superimposed on the intensity spectrum. The origin of these fringes is not clear to the DISR team, and in fact two of the three DISR instruments produced for the program did not show these fringes. The flight model, however suffers from these weak fringes.

We planned to take measurements from calibration lamps at four altitudes during the descent into Titan’s atmosphere. These altitudes were selected to give a good distribution in temperature of the DISR optics and IR detector. The measurements from these incandescent lamps show the fringe patterns with excellent signal to noise ratio, and interpolation in these fringe patterns with temperature can be used to remove the fringes from the ULIS spectra. Unfortunately, the electronics in the radar altimeter used by the probe to measure altitude had an error that prevented it from measuring the altitude selected for the fourth calibration data set. Because of this, we only have the fringe pattern at three of the four expected temperatures. Nevertheless, we provide below the raw fringe patterns for the ULIS at these three temperatures. At still colder temperatures, we simply extrapolated in the patterns measured.

2. Wavelength calibration

The wavelength scale of the ULIS and DLIS portions of the instrument are given as functions of pixel number and the read-out value of the temperature of the optics. The expression for the DLIS is

$$\text{DLIS wavelength (nm)} = a + b*N + c*N^2$$

Where N is the number of the detector element and the count begins with 0 and ends with 149. The values of a, b, and c depend on the temperature of the optics, with

$$a = 784.04 - 0.023725*T + 4.569 \times 10^{-5} * T^2,$$

$$b = 7.1568 + 0.0014118*T - 2.8753 \times 10^{-6} * T^2,$$

$$c = -0.0030065 - 1.4648 \times 10^{-5} * T + 3.0378 \times 10^{-8} * T^2$$

where T is the optics temperature.

The wavelength scale for the ULIS portion of the IR spectrometer is given by

$$\text{ULIS wavelength (nm)} = d + e*N + f*N^2$$

Where N is the detector element and the count begins with 0 and ends with 149. The values of d, e, and f depend on the temperature of the optics, with

$$d = 766.39 + 0.025199*T,$$

$$e = 7.5138 - 8.1082 \times 10^{-4} * T,$$

$$f = -0.0059698 + 5.991 \times 10^{-6} * T.$$

Again, T is the temperature of the optics.

3. Spectral Resolution

The spectral line shape produced by the instrument is a gaussian function with a full width at half maximum response (FWHM) that depends on the wavelength and the temperature of the optics. For the DLIS, the result is

$$\text{DLIS FWHM(nm)} = A(T) + B(T)*\lambda + C(T)*\lambda^2 + D(T)*\lambda^3, \quad (20.)$$

where $A(T) = 529.84 - 5.9278*T + 0.015406*T^2,$ (21.)

$$B(T) = -1.2194 + 0.015864*T - 4.1121 \times 10^{-5}*T^2, \quad (22.)$$

$$C(T) = 1.1263 \times 10^{-3} - 1.3879 \times 10^{-6}*T + 3.576 \times 10^{-8}*T^2, \quad (23.)$$

$$D(T) = -3.1689 \times 10^{-7} + 3.9644 \times 10^{-9}*T - 1.0152 \times 10^{-11}*T^2. \quad (24.)$$

For the ULIS, the result is

$$\text{ULIS FWHM(nm)} = a(T) + B(T)*\lambda + C(T)*\lambda^2 + D(T)*\lambda^3 \quad (25.)$$

where $A(T) = -224.34 + 0.90546*T$ (26.)

$$B(T) = 0.68932 - 0.0024122*T \quad (27.)$$

$$C(T) = -6.1296 \times 10^{-4} + 2.0406 \times 10^{-6}*T \quad (28.)$$

$$D(T) = 1.751 \times 10^{-7} - 5.5931 \times 10^{-10}*T. \quad (29.)$$

4. The Absolute responsivity of the IR spectrometers

The DISR sensor head was inserted into a 20-inch diameter integrating sphere. Light from a tungsten lamp was admitted into the integrating sphere through a small hole. The incident beam bounced off a small baffle, and then illuminated the entire inside of the sphere. A calibrated laboratory monochromator was used to observe a spot near the front of the integrating sphere and measured the absolute brightness as a function of wavelength of the wall of the integrating sphere. This test was repeated at many temperatures over the operating range of the instrument, and the responsivity of the instrument was measured as a function of detector temperature for the ULIS and the DLIS.

The spectral range of the IR spectrometer was from 850 to 1700 nm. However, the responsivity of the IR detectors was appreciable shortward of 850 nm. A filter was used in the optical path of DISR to suppress response to second-order light. However, the cutoff of this filter between 800 and 850 nm was not sufficiently sharp to prevent some response to light between these wavelengths in second-order at the locations of pixels intended to measure light between 1600 and 1700 nm in first order. In addition, the response of the long wavelength edge of the response of the detector moved from 1700 nm to 1600 nm as the detector cooled from room temperature to its expected operating temperature of 200 K or less. Thus, the effective range of the IR spectrometer as used in Titan's atmosphere is limited to the wavelength interval from 850 to 1600 nm. In the tables below, we give the response of the instrument to light from 850 to 1700 nm in first order, and the response to second-order light from 800 to 850 nm also.

4.1 Response of the DLIS

The absolute responsivity of the DLIS as a function of pixel number and detector temperature is given below:

Pixel	Wavelength	189	223	233	242	252	255	271	286
7	832.18	9693.9	9075.7	8669.7	8428.1	8215.8	8116.7	7830.7	7431.8
8	839.43	13131.2	12503.5	12112.5	11887.5	11689.6	11581.9	11282.7	10913.6
9	846.68	15262.1	14741.1	14438.2	14251.6	14089.4	13976.4	13693.8	13354.2
10	853.91	16809.8	16439.4	16205.8	16070.2	15947.6	15832.8	15553.3	15219.0
11	861.13	18755.0	18464.8	18296.9	18200.9	18107.5	18020.6	17766.5	17468.2
12	868.35	19882.5	19635.4	19504.4	19448.5	19394.5	19344.4	19154.9	18938.4
13	875.55	21820.8	21452.6	21332.2	21275.4	21223.8	21174.7	20969.1	20705.5
14	882.75	23545.8	22747.9	22572.5	22477.3	22422.6	22367.9	22197.7	22020.0
15	889.93	27194.9	25195.1	24850.8	24631.2	24516.6	24407.0	24196.4	24011.1
16	897.11	31833.9	28003.9	27239.3	26688.2	26407.7	26107.5	25726.9	25428.1
17	904.28	38255.4	32712.1	31400.7	30283.1	29673.8	28978.4	28208.2	27662.5
18	911.44	44164.8	38198.3	36490.5	34872.9	33901.7	32667.0	31236.2	30156.7
19	918.58	50306.3	45147.8	43428.5	41636.5	40456.9	38852.4	36754.0	35016.5
20	925.72	54335.2	50620.7	49253.1	47718.6	46654.0	45107.0	42825.7	40717.1
21	932.85	58350.0	56029.0	55125.1	54021.3	53229.6	52046.3	50063.1	48069.0
22	939.97	59896.9	58827.7	58354.1	57691.3	57221.9	56516.1	55164.0	53737.7

23	947.08	61478.8	61224.9	61090.1	60783.7	60571.8	60286.5	59493.6	58621.6
24	954.19	61179.6	61252.1	61256.4	61146.2	61098.6	61070.1	60706.0	60264.6
25	961.28	62160.2	62193.1	62243.5	62175.3	62178.8	62260.8	62060.4	61798.4
26	968.36	62169.7	61947.7	61910.4	61788.7	61764.1	61804.9	61602.7	61339.6
27	975.43	64136.6	63601.5	63481.3	63276.8	63186.1	63156.9	62839.0	62469.7
28	982.50	65536.1	64724.4	64504.0	64205.5	64063.0	63936.9	63563.8	63138.9
29	989.55	68686.1	67724.9	67471.9	67121.8	66932.8	66755.7	66293.5	65777.4
30	996.60	70812.8	69814.5	69517.8	69122.7	68919.2	68668.5	68114.1	67464.9
31	1003.63	74121.5	73219.7	72969.3	72596.4	72398.8	72189.8	71650.5	71019.9
32	1010.66	75279.0	74619.8	74415.8	74087.8	73918.0	73702.5	73125.7	72390.3
33	1017.68	77230.1	76874.2	76771.3	76533.4	76430.6	76348.5	75978.4	75471.9
34	1024.68	76605.8	76553.2	76519.7	76357.8	76318.4	76313.4	76094.5	75764.8
35	1031.68	77034.8	77179.7	77232.2	77146.1	77148.8	77242.3	77168.3	77029.3
36	1038.67	75427.1	75674.8	75731.8	75662.1	75695.0	75801.4	75765.0	75609.5
37	1045.65	75600.9	75813.5	75888.2	75826.9	75849.1	75982.9	75975.1	75851.1
38	1052.62	74295.2	74380.9	74391.6	74288.0	74296.1	74368.8	74323.7	74138.2
39	1059.58	74961.4	74860.1	74848.8	74700.0	74682.9	74761.0	74753.4	74673.5
40	1066.53	74430.1	74093.2	73984.2	73765.9	73706.9	73702.8	73633.1	73496.9
41	1073.47	76218.9	75665.3	75512.2	75230.3	75122.5	75073.2	74901.1	74646.9
42	1080.40	76651.2	75911.5	75671.7	75326.6	75176.7	75045.4	74835.5	74526.3
43	1087.32	79575.8	78653.7	78380.6	77967.1	77779.6	77610.7	77340.7	77004.9
44	1094.24	80499.4	79516.0	79178.4	78730.6	78516.3	78305.7	78004.8	77619.3
45	1101.14	83445.9	82441.7	82121.7	81662.0	81437.1	81220.8	80887.4	80479.6
46	1108.04	84543.8	83618.4	83285.2	82820.4	82597.3	82372.7	82058.3	81640.9
47	1114.92	86798.3	86005.2	85720.0	85286.0	85081.7	84894.6	84591.1	84198.0
48	1121.80	86283.5	85689.3	85434.1	85041.1	84869.1	84711.2	84473.8	84103.5
49	1128.66	87291.3	86913.7	86733.0	86403.7	86266.6	86182.7	86002.3	85683.8
50	1135.52	85228.1	85099.4	84985.3	84728.7	84646.3	84627.3	84551.7	84288.8
51	1142.37	86425.2	86402.0	86328.2	86094.8	86027.5	86057.4	86037.1	85864.5
52	1149.20	84204.3	84274.1	84207.2	84003.8	83966.3	84020.6	84063.1	83958.3
53	1156.03	84150.1	84242.9	84206.4	84016.8	83989.7	84076.9	84146.8	84063.0
54	1162.85	81799.9	81875.1	81821.3	81632.9	81608.6	81685.7	81782.0	81720.9
55	1169.66	81656.8	81674.1	81625.1	81420.5	81383.9	81465.9	81546.2	81474.6
56	1176.46	79168.8	79082.6	78988.2	78767.8	78724.3	78759.7	78825.7	78754.1
57	1183.25	79589.1	79385.5	79288.1	79030.7	78950.2	78967.9	79004.4	78894.6
58	1190.03	78168.2	77833.4	77659.9	77345.3	77207.8	77066.7	76708.6	75867.6
59	1196.81	78473.8	78012.2	77843.2	77512.7	77380.6	77303.3	77169.0	76810.5
60	1203.57	77703.8	77120.7	76889.1	76537.0	76403.0	76284.6	76136.6	75810.9
61	1210.32	79640.5	78928.2	78669.1	78275.4	78102.1	77974.3	77844.3	77596.9
62	1217.07	78966.3	78176.8	77885.7	77459.7	77287.3	77124.4	76961.5	76654.8
63	1223.80	79531.8	78693.5	78402.5	77971.2	77786.6	77611.6	77402.2	77052.0

64	1230.52	80134.1	79236.3	78901.4	78442.5	78247.5	78042.7	77837.9	77504.1
65	1237.24	81708.5	80813.8	80491.1	80025.2	79806.5	79610.7	79379.7	79027.2
66	1243.95	81157.2	80284.2	79949.0	79480.9	79273.2	79062.1	78842.2	78499.8
67	1250.64	82512.2	81707.7	81405.1	80941.4	80734.1	80550.3	80328.5	79972.1
68	1257.33	81802.0	81043.4	80736.1	80298.6	80109.8	79922.3	79723.8	79389.8
69	1264.01	82889.8	82191.3	81899.7	81424.3	81168.1	80844.8	80135.3	78836.7
70	1270.68	81897.3	81314.5	81046.9	80640.4	80487.0	80337.2	80206.2	79944.1
71	1277.34	82496.7	81996.6	81766.1	81390.9	81231.6	81122.3	80999.5	80740.0
72	1283.99	80306.5	79932.3	79722.3	79381.7	79267.2	79173.1	79098.5	78853.3
73	1290.63	80981.1	80646.2	80462.8	80133.5	80011.2	79932.8	79864.7	79648.2
74	1297.26	79254.8	78986.3	78813.9	78502.0	78406.1	78340.8	78305.3	78107.6
75	1303.88	79427.4	79181.7	79030.5	78728.5	78626.2	78584.2	78548.3	78369.7
76	1310.49	77634.8	77418.1	77253.4	76961.4	76881.4	76826.1	76811.9	76640.5
77	1317.09	77850.0	77618.9	77468.1	77178.2	77086.5	77047.6	77038.4	76864.1
78	1323.69	75994.2	75766.8	75591.2	75303.5	75227.1	75171.9	75155.1	74977.7
79	1330.27	76122.9	75850.3	75664.8	75376.2	75279.5	75233.5	75211.3	75035.8
80	1336.84	74389.2	74113.7	73906.4	73616.5	73530.3	73461.4	73430.8	73227.3
81	1343.41	74122.4	73776.5	73545.8	73245.1	73129.2	73061.4	72999.5	72769.0
82	1349.96	71332.9	70944.8	70668.3	70366.9	70259.8	70154.8	70089.4	69856.0
83	1356.51	69986.0	69497.0	69195.5	68872.5	68735.9	68627.0	68532.7	68282.8
84	1363.05	68237.7	67702.3	67356.7	67053.8	66920.2	66789.1	66667.5	66393.7
85	1369.57	69008.0	68468.5	68123.3	67815.7	67674.1	67547.7	67398.6	67104.5
86	1376.09	67933.9	67380.9	66941.2	66635.5	66475.6	66319.4	66111.8	65750.9
87	1382.60	67797.0	67168.1	66660.7	66327.5	66125.2	65952.7	65694.1	65251.5
88	1389.10	65902.1	65233.4	64706.4	64399.9	64217.4	64052.0	63786.3	63347.5
89	1395.59	65703.1	64985.1	64445.6	64150.4	63943.0	63817.5	63535.0	63087.3
90	1402.07	64468.5	63714.6	63127.9	62827.7	62626.1	62509.1	62182.6	61670.4
91	1408.54	65945.0	65093.4	64461.2	64138.5	63906.8	63763.9	63426.4	62895.1
92	1415.00	65500.0	64676.3	64018.6	63677.3	63442.6	63297.1	62943.6	62386.9
93	1421.45	67245.3	66404.2	65755.9	65405.1	65168.2	65006.8	64635.8	64058.9
94	1427.90	67168.2	66416.4	65784.8	65460.4	65248.2	65059.3	64682.5	64116.9
95	1434.33	68745.8	68054.8	67493.6	67175.8	66948.9	66755.2	66391.5	65851.5
96	1440.75	68712.6	68114.8	67575.4	67251.5	67052.8	66840.8	66479.1	65932.4
97	1447.17	70167.9	69626.1	69124.9	68814.1	68611.9	68357.4	67989.4	67423.7
98	1453.57	69617.8	69163.4	68685.8	68376.1	68180.0	67901.7	67556.0	67017.5
99	1459.97	70501.0	70111.0	69667.8	69354.8	69151.7	68870.6	68551.2	68047.0
100	1466.35	69287.2	68997.6	68549.3	68265.6	68090.8	67798.1	67470.9	66975.7
101	1472.73	69039.9	68817.4	68449.3	68180.4	68029.9	67731.4	67402.5	66829.1
102	1479.10	67949.9	67835.3	67472.4	67223.9	67073.3	66795.1	66501.3	66023.2
103	1485.46	67234.8	67225.6	66933.9	66706.2	66565.8	66293.1	66019.5	65486.7
104	1491.80	64598.6	64807.9	64546.4	64379.2	64288.2	64055.9	63783.0	63207.3

105	1498.14	66054.1	66138.0	65868.4	65696.8	65586.8	65350.6	65142.7	64751.1
106	1504.47	64359.2	64513.4	64259.0	64098.0	63998.0	63777.3	63570.3	63209.9
107	1510.79	63992.6	64181.9	63966.2	63795.6	63691.3	63481.5	63310.4	62943.9
108	1517.10	60599.5	61036.4	60849.1	60747.4	60710.9	60544.8	60393.4	59929.4
109	1523.40	61390.7	61899.8	61727.5	61635.5	61569.9	61413.7	61281.8	60925.2
110	1529.70	60062.1	60452.0	60325.2	60213.9	60152.9	59986.9	59855.1	59537.7
111	1535.98	59422.2	59883.2	59748.9	59657.5	59658.8	59522.0	59424.6	59127.5
112	1542.25	57542.0	58067.9	57915.4	57833.3	57811.1	57706.5	57677.6	57403.1
113	1548.52	56973.5	57588.9	57479.5	57442.9	57420.1	57321.2	57259.2	56983.1
114	1554.77	54956.7	55642.5	55550.3	55543.0	55550.7	55470.1	55423.4	55192.6
115	1561.02	54234.5	54941.5	54887.7	54890.4	54899.7	54847.0	54859.4	54649.9
116	1567.25	52221.7	53050.5	52965.6	52973.6	53007.7	52974.5	53015.7	52853.6
117	1573.48	51662.3	52576.6	52500.2	52508.3	52532.6	52504.2	52556.5	52381.3
118	1579.69	49756.9	50849.2	50779.1	50827.8	50851.9	50823.1	50850.4	50694.2
119	1585.90	48524.7	50010.2	49987.7	50023.3	50038.1	49979.1	49968.7	49602.4
120	1592.10	45986.3	48319.8	48304.4	48393.5	48441.6	48445.4	48539.1	48410.0
121	1598.29	43120.2	47641.4	47684.0	47818.3	47895.5	47915.2	48079.8	47952.7
122	1604.47	36586.6	45857.9	45982.6	46170.1	46289.5	46355.4	46540.2	46455.2
123	1610.64	27910.0	44707.6	45073.8	45390.2	45552.7	45671.0	45912.4	45834.0
124	1616.80	18380.1	42304.5	43071.4	43609.6	43839.4	44017.5	44365.0	44402.3
125	1622.95	12252.2	39789.4	41748.8	42699.9	43066.3	43347.3	43813.5	43897.2
126	1629.09	7803.2	34017.5	38373.7	40285.7	40916.2	41437.5	42024.8	42216.4
127	1635.22	5887.0	27473.4	34698.5	38624.8	39791.5	40696.9	41530.3	41798.4
128	1641.34	4279.4	19843.7	28173.4	34756.1	37069.6	38707.6	39863.8	40317.1
129	1647.46	3736.1	15081.2	22107.3	29857.3	33616.4	36618.1	38399.6	38922.6
130	1653.56	2733.0	10117.0	15289.9	22933.7	28174.8	33633.1	36931.7	38090.0
131	1659.65	2446.3	7911.2	11629.4	17678.5	22792.3	29927.3	35532.4	37478.1
132	1665.74	1743.5	5367.4	7821.3	12144.2	16286.7	23609.7	31722.0	35372.3
133	1671.81	1954.9	4721.6	6551.3	9638.8	12621.9	18392.0	27110.8	32620.6
134	1677.88	1214.7	3156.6	4383.1	6564.1	8700.8	13042.2	21317.0	28971.8
135	1683.94	1287.7	2612.7	3475.6	5025.2	6561.4	9758.5	16482.0	24430.8
136	1689.99	940.1	1853.9	2426.4	3520.1	4621.9	6850.2	11705.8	18404.0
137	1696.02	1117.0	1810.3	2239.8	3024.0	3843.2	5505.7	9162.2	14283.1
138	1702.05	802.7	1328.4	1595.3	2165.3	2728.2	3824.5	6316.8	10092.7
139	1708.07	1270.8	1715.9	1925.7	2353.1	2825.4	3695.8	5676.6	8518.7
140	1714.08	693.8	1050.7	1142.2	1457.4	1795.0	2399.1	3759.5	5713.6
141	1720.08	901.6	1176.4	1284.2	1494.8	1727.5	2188.9	3241.6	4671.1
142	1726.07	619.4	836.3	866.4	1026.7	1215.7	1540.0	2262.7	3261.0
	Second-Order Response								
105	749.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

106	752.24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107	755.40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
108	758.55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
109	761.70	15.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110	764.85	18.2	15.1	0.0	0.0	0.0	0.0	0.0	0.0
111	767.99	22.4	18.0	16.8	15.5	0.0	0.0	0.0	0.0
112	771.13	29.7	22.0	19.8	18.5	17.3	16.6	0.0	0.0
113	774.26	46.6	29.2	25.9	22.9	20.6	19.6	17.2	14.9
114	777.39	63.8	45.6	38.8	31.1	27.3	25.3	20.3	17.7
115	780.51	80.9	62.8	55.9	48.2	41.6	37.5	26.8	21.4
116	783.63	98.1	79.9	73.1	65.4	58.8	54.7	40.7	28.3
117	786.74	129.8	97.1	90.2	82.5	75.9	71.9	57.8	43.7
118	789.85	169.0	127.9	114.4	99.7	93.1	89.0	75.0	60.9
119	792.95	220.5	166.2	148.0	133.0	120.0	112.1	92.2	78.1
120	796.05	285.6	217.1	194.8	173.4	155.1	145.6	118.2	95.2
121	799.14	370.1	281.5	252.9	226.0	203.3	191.4	152.5	124.2
122	802.23	475.4	364.5	328.8	292.3	264.8	248.2	200.2	161.0
123	805.32	601.3	468.7	424.5	379.0	342.9	322.8	260.9	210.7
124	808.40	749.0	593.7	542.4	486.3	442.2	417.0	338.4	273.7
125	811.47	913.4	739.9	678.6	614.6	563.7	533.3	436.5	354.0
126	814.54	1088.9	903.6	836.7	763.8	702.7	668.5	556.8	456.0
127	817.61	1275.7	1078.4	1005.5	929.2	864.5	824.9	694.7	579.6
128	820.67	1461.3	1265.0	1190.6	1106.1	1035.8	993.1	855.5	722.4
129	823.73	1647.2	1450.2	1374.6	1293.0	1221.6	1177.3	1026.0	885.2
130	826.78	1819.1	1637.1	1564.2	1479.3	1405.2	1361.7	1211.7	1058.4
131	829.83	1986.9	1809.0	1740.7	1663.5	1595.6	1550.9	1395.1	1244.7
132	832.87	2137.1	1977.6	1913.0	1835.5	1768.9	1728.7	1585.5	1429.1
133	835.91	2276.2	2128.5	2068.7	2001.8	1939.8	1901.5	1759.8	1617.8
134	838.94	2401.1	2268.6	2215.8	2151.1	2093.6	2058.1	1931.1	1790.0
135	841.97	2516.4	2394.0	2344.5	2288.4	2237.7	2206.5	2085.5	1959.9
136	844.99	2607.5	2511.1	2466.3	2412.3	2365.0	2335.7	2230.7	2112.1
137	848.01	2692.3	2602.7	2566.1	2525.0	2486.4	2457.8	2358.4	2254.1
138	851.03	2761.0	2687.4	2653.4	2615.4	2581.4	2559.6	2479.9	2380.4
139	854.04	2820.6	2757.1	2730.2	2700.1	2667.5	2647.4	2576.4	2501.0
140	857.04	2869.9	2817.8	2797.3	2767.3	2741.4	2725.5	2663.0	2592.8
141	860.04	2910.3	2867.1	2847.3	2825.2	2806.2	2792.6	2737.8	2678.1
142	863.04	2936.9	2908.8	2896.6	2874.5	2855.5	2843.8	2803.6	2749.7

The response of the ULIS instrument is given below:

Pixel	Wavelength	189	223	233	243	252	255	271	286
7	822.54	507.99	487.36	470.53	450.65	442.27	436.64	428.16	401.97
8	829.82	814.19	790.21	768.52	749.67	736.40	732.23	718.44	692.60
9	837.10	1006.48	984.25	975.38	952.17	942.83	936.17	920.20	873.96
10	844.36	1128.62	1118.40	1112.11	1100.29	1091.69	1090.05	1066.53	1012.60
11	851.61	1276.78	1275.12	1284.38	1269.63	1266.83	1266.66	1254.58	1228.89
12	858.86	1390.79	1401.65	1413.20	1411.41	1409.72	1417.17	1404.31	1383.42
13	866.09	1535.60	1546.51	1570.68	1566.54	1573.11	1581.27	1575.52	1555.25
14	873.32	1677.42	1673.94	1690.80	1693.37	1695.77	1708.80	1699.16	1681.22
15	880.53	1889.02	1827.13	1844.84	1833.33	1837.13	1844.11	1835.01	1814.70
16	887.74	2193.54	2012.82	2003.23	1984.10	1976.42	1977.54	1957.49	1934.67
17	894.93	2698.70	2364.15	2326.17	2266.31	2243.04	2219.22	2175.82	2121.64
18	902.12	3217.29	2776.42	2689.49	2594.47	2537.65	2477.33	2384.52	2312.75
19	909.29	3713.19	3276.45	3175.10	3044.73	2964.01	2863.61	2706.09	2561.80
20	916.46	4082.47	3741.58	3644.83	3523.59	3437.10	3318.97	3127.39	2957.97
21	923.61	4439.93	4214.27	4165.22	4068.25	3999.49	3898.68	3686.71	3456.20
22	930.76	4815.29	4676.23	4648.28	4586.74	4535.39	4452.10	4236.82	3971.30
23	937.90	5121.96	5049.74	5052.20	5006.03	4973.03	4923.67	4774.65	4602.82
24	945.02	5183.63	5166.09	5171.49	5150.58	5131.00	5105.65	4994.64	4875.86
25	952.14	5213.11	5240.88	5276.46	5267.26	5262.22	5251.65	5121.52	4918.98
26	959.25	5235.43	5282.19	5318.15	5330.04	5335.12	5344.86	5281.36	5197.34
27	966.35	5332.70	5377.08	5430.01	5437.61	5447.06	5466.69	5426.32	5364.73
28	973.43	5422.90	5437.21	5466.33	5469.73	5470.00	5479.34	5425.64	5367.54
29	980.51	5506.42	5485.70	5511.28	5495.83	5488.97	5484.54	5394.33	5242.62
30	987.58	5638.80	5592.24	5600.26	5585.50	5573.90	5566.05	5493.67	5412.15
31	994.64	5899.59	5850.88	5878.21	5859.44	5851.20	5844.14	5778.82	5693.61
32	1001.69	6174.41	6129.13	6150.33	6140.84	6132.59	6122.91	6047.98	5976.67
33	1008.73	6529.87	6481.63	6513.96	6495.63	6486.48	6476.73	6399.33	6301.69
34	1015.76	6680.93	6632.78	6643.50	6625.40	6610.89	6597.97	6513.66	6426.44
35	1022.77	6734.03	6702.54	6724.38	6701.61	6690.00	6681.37	6613.01	6516.01
36	1029.78	6631.04	6634.64	6657.48	6654.14	6650.41	6651.51	6589.62	6524.29
37	1036.78	6633.66	6675.47	6732.78	6735.68	6744.53	6757.36	6716.07	6643.75
38	1043.77	6646.42	6705.96	6759.35	6776.47	6786.35	6801.61	6756.70	6703.71
39	1050.75	6711.29	6764.41	6824.77	6828.13	6832.47	6834.93	6740.43	6567.48
40	1057.73	6724.49	6748.13	6777.29	6775.07	6772.40	6778.13	6725.60	6663.35
41	1064.69	6685.88	6679.86	6707.79	6689.06	6680.65	6681.23	6627.71	6529.56
42	1071.64	6602.61	6586.76	6601.13	6588.41	6580.36	6576.18	6524.52	6456.29
43	1078.58	6714.52	6699.93	6738.93	6726.01	6723.61	6721.77	6678.61	6600.90
44	1085.51	6905.29	6887.28	6920.39	6915.53	6911.63	6905.87	6850.04	6786.46
45	1092.43	7263.63	7225.25	7269.55	7251.79	7247.37	7239.11	7182.63	7097.68

46	1099.34	7519.34	7456.05	7467.58	7446.61	7429.24	7409.98	7330.59	7241.27
47	1106.25	7768.21	7678.50	7687.63	7644.65	7621.46	7594.35	7517.29	7401.44
48	1113.14	7747.42	7653.30	7638.06	7602.19	7575.62	7548.67	7463.49	7365.54
49	1120.02	7717.81	7652.27	7665.62	7631.43	7613.82	7594.30	7528.31	7426.25
50	1126.89	7676.78	7653.31	7675.06	7661.19	7654.22	7644.83	7581.55	7504.63
51	1133.76	7833.78	7849.04	7908.06	7901.28	7902.60	7902.04	7850.45	7746.36
52	1140.61	7916.09	7949.65	8000.39	8005.79	8007.06	8010.22	7947.53	7837.91
53	1147.45	8124.23	8154.03	8209.96	8202.26	8201.88	8206.72	8161.48	8066.84
54	1154.29	8090.02	8104.94	8125.60	8114.43	8103.95	8103.28	8041.65	7951.46
55	1161.11	7902.12	7911.72	7937.79	7914.10	7899.46	7884.64	7759.24	7504.71
56	1167.93	7701.64	7714.79	7729.07	7717.10	7707.34	7707.76	7663.14	7593.07
57	1174.73	7440.95	7478.75	7525.18	7517.84	7519.00	7526.41	7473.15	7326.71
58	1181.53	7349.07	7406.69	7455.20	7464.63	7470.29	7477.70	7427.65	7295.47
59	1188.31	7514.50	7575.54	7648.88	7654.22	7667.14	7682.46	7660.85	7593.96
60	1195.09	7651.88	7702.35	7756.82	7765.28	7769.83	7778.08	7743.80	7683.54
61	1201.85	7869.26	7894.64	7953.57	7942.05	7939.57	7945.01	7904.91	7818.68
62	1208.61	7917.89	7909.59	7932.06	7916.04	7902.23	7894.54	7839.01	7757.61
63	1215.35	7954.40	7919.70	7941.83	7908.16	7889.93	7881.59	7823.26	7711.14
64	1222.09	7859.41	7814.47	7820.05	7793.69	7777.74	7763.57	7705.36	7618.37
65	1228.82	7845.46	7809.59	7842.12	7814.88	7804.54	7799.22	7749.47	7653.37
66	1235.53	7826.38	7807.98	7838.12	7828.03	7822.04	7815.99	7771.51	7704.15
67	1242.24	7966.49	7969.64	8032.19	8022.00	8021.23	8022.32	7981.99	7898.29
68	1248.94	8119.37	8137.19	8187.79	8188.03	8189.24	8185.72	8132.45	8053.21
69	1255.63	8351.53	8366.00	8433.79	8424.82	8424.84	8426.02	8375.11	8276.79
70	1262.30	8502.88	8506.61	8545.94	8538.07	8529.23	8522.97	8464.80	8380.24
71	1268.97	8629.16	8616.05	8655.77	8626.13	8615.16	8609.52	8548.73	8432.83
72	1275.63	8566.81	8540.52	8547.87	8524.94	8505.74	8492.55	8429.27	8332.99
73	1282.28	8466.86	8451.80	8478.49	8446.45	8434.66	8431.02	8378.25	8268.81
74	1288.92	8263.04	8274.46	8299.23	8286.42	8277.28	8278.45	8233.60	8158.70
75	1295.55	8162.13	8198.88	8252.40	8239.88	8239.47	8247.57	8215.28	8127.84
76	1302.16	8046.64	8103.90	8152.24	8157.93	8160.18	8173.30	8143.24	8079.27
77	1308.77	8059.08	8138.90	8222.14	8224.32	8237.47	8259.52	8239.10	8164.59
78	1315.37	8083.30	8179.04	8251.90	8269.58	8279.94	8302.36	8280.76	8225.45
79	1321.96	8110.96	8211.21	8304.97	8313.10	8329.57	8356.16	8322.72	8196.06
80	1328.54	8244.73	8335.57	8402.88	8411.99	8418.81	8437.50	8406.41	8336.28
81	1335.11	8299.49	8371.64	8438.87	8429.24	8427.46	8445.78	8413.90	8320.77
82	1341.67	8177.01	8222.98	8257.65	8248.51	8237.51	8247.58	8213.95	8133.29
83	1348.22	7937.64	7969.77	8013.00	7988.32	7980.39	7992.22	7964.72	7872.43
84	1354.77	7592.50	7622.17	7652.00	7647.23	7641.05	7654.72	7630.51	7567.40
85	1361.30	7359.39	7397.70	7457.67	7440.17	7443.11	7463.80	7451.03	7380.43
86	1367.82	7335.20	7380.33	7426.84	7417.35	7411.65	7423.77	7376.82	7288.31

87	1374.33	7344.10	7394.29	7464.14	7449.56	7453.12	7479.12	7460.36	7378.69
88	1380.83	7407.48	7465.83	7519.76	7518.24	7515.41	7530.86	7474.16	7355.25
89	1387.32	7498.47	7553.65	7644.11	7627.64	7642.92	7669.73	7665.28	7596.04
90	1393.81	7737.24	7792.02	7861.86	7874.31	7880.77	7924.17	7910.28	7851.92
91	1400.28	7916.14	7953.13	8045.40	8032.66	8044.37	8080.65	8057.97	7962.40
92	1406.74	8114.30	8143.83	8197.92	8196.55	8191.13	8229.15	8187.74	8083.07
93	1413.19	8269.38	8279.78	8346.90	8312.37	8309.36	8339.32	8307.39	8209.32
94	1419.64	8347.82	8348.05	8374.27	8358.16	8343.77	8377.91	8330.39	8217.66
95	1426.07	8188.05	8188.44	8250.65	8213.28	8212.19	8234.23	8190.50	8005.78
96	1432.50	8290.12	8305.82	8346.61	8333.21	8310.40	8289.27	8072.17	7655.01
97	1438.91	8273.56	8304.77	8402.31	8369.19	8380.89	8408.26	8394.97	8300.51
98	1445.31	8255.16	8318.14	8386.29	8383.99	8383.18	8405.40	8340.75	8173.53
99	1451.71	8269.36	8327.58	8438.88	8406.31	8418.58	8438.32	8420.46	8315.72
100	1458.09	8172.05	8255.50	8332.91	8335.16	8338.82	8364.62	8334.95	8233.60
101	1464.47	8145.10	8227.48	8356.74	8326.71	8348.02	8366.63	8355.94	8264.35
102	1470.83	7727.94	7864.24	7977.53	7993.12	8012.94	8049.25	8006.12	7769.86
103	1477.19	8110.15	8239.68	8389.73	8375.84	8407.49	8423.19	8416.94	8314.93
104	1483.53	8089.76	8240.97	8367.12	8385.52	8403.86	8441.54	8425.01	8336.44
105	1489.87	8150.85	8289.77	8447.69	8432.38	8460.91	8472.14	8432.30	8256.27
106	1496.20	8115.92	8265.87	8377.86	8388.70	8396.71	8426.82	8398.81	8294.89
107	1502.51	8079.41	8199.93	8333.25	8300.54	8318.57	8332.55	8314.75	8193.86
108	1508.82	7936.66	8056.82	8146.32	8139.81	8138.99	8160.14	8137.96	8031.86
109	1515.12	7775.32	7894.30	8015.72	7984.95	8000.19	8018.52	8006.70	7871.95
110	1521.40	7615.90	7751.99	7846.07	7858.81	7868.37	7902.63	7895.34	7798.29
111	1527.68	7474.17	7626.52	7771.06	7753.53	7792.05	7820.63	7812.19	7712.50
112	1533.95	7351.11	7533.05	7653.43	7675.21	7699.44	7738.16	7724.20	7607.54
113	1540.21	7235.16	7409.90	7561.26	7557.78	7591.26	7618.73	7629.90	7535.30
114	1546.45	7098.32	7287.16	7399.24	7422.13	7444.27	7492.44	7495.69	7437.37
115	1552.69	6939.49	7126.90	7268.81	7259.72	7288.79	7318.49	7336.83	7251.33
116	1558.92	6728.64	6930.48	7040.73	7066.90	7093.07	7134.04	7148.72	7085.11
117	1565.14	6592.38	6804.31	6947.09	6952.20	6994.61	7032.28	7070.78	7009.13
118	1571.35	6417.67	6661.69	6783.09	6822.30	6861.19	6921.90	6959.96	6935.05
119	1577.55	6367.69	6624.36	6775.55	6789.45	6837.41	6885.92	6937.91	6888.88
120	1583.74	6257.26	6561.33	6684.41	6725.58	6762.92	6823.01	6862.40	6821.90
121	1589.92	6069.01	6461.65	6607.82	6619.10	6670.50	6712.07	6764.10	6721.27
122	1596.09	5733.24	6343.93	6450.84	6491.69	6518.34	6574.72	6604.72	6532.84
123	1602.25	5103.79	6210.91	6339.63	6345.20	6382.67	6420.88	6458.98	6391.93
124	1608.40	4064.24	5983.05	6098.16	6133.28	6157.59	6213.28	6244.98	6209.55
125	1614.54	2999.50	5715.46	5885.70	5910.96	5956.18	6000.94	6056.26	6015.81
126	1620.67	2012.98	5296.07	5550.84	5654.93	5701.81	5773.71	5842.16	5819.95
127	1626.79	1392.62	4728.47	5245.99	5414.36	5508.48	5586.72	5668.54	5629.01

128	1632.90	983.78	3948.54	4748.36	5129.39	5275.38	5414.74	5521.77	5524.54
129	1639.00	768.35	3109.86	4124.82	4758.16	5016.71	5209.74	5348.22	5301.57
130	1645.09	696.82	2446.01	3341.75	4119.49	4498.00	4812.28	4964.98	4846.12
131	1651.18	511.89	1714.20	2550.22	3434.33	4014.40	4559.13	4888.31	4903.56
132	1657.25	396.92	1224.27	1815.95	2603.30	3214.69	3990.47	4528.97	4659.53
133	1663.31	338.53	899.55	1313.23	1887.94	2439.53	3285.79	4129.80	4399.99
134	1669.36	285.26	703.02	997.43	1412.34	1828.99	2605.38	3637.16	4141.40
135	1675.41	258.80	556.41	778.65	1067.67	1381.10	1991.60	3060.54	3803.74
136	1681.44	238.50	460.39	621.33	853.98	1096.34	1582.70	2512.15	3361.82
137	1687.46	234.90	391.17	517.11	667.60	841.54	1188.13	1937.66	2743.98
138	1693.48	215.41	331.16	424.23	545.94	672.55	939.64	1520.18	2164.26
139	1699.48	206.79	310.55	383.23	463.56	561.85	750.70	1194.82	1737.35
140	1705.48	177.54	258.02	318.12	395.50	464.20	613.03	936.25	1353.58
141	1711.46	189.35	253.06	310.01	350.67	415.08	528.01	775.37	1049.02
142	1717.43	24.60	89.66	134.89	176.26	215.49	303.87	490.65	686.33
90	696.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
91	700.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
92	703.37	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00
93	706.60	0.41	0.12	0.01	0.00	0.00	0.00	0.00	0.00
94	709.82	0.68	0.38	0.27	0.16	0.06	0.00	0.00	0.00
95	713.04	0.97	0.66	0.55	0.43	0.32	0.26	0.04	0.00
96	716.25	1.27	0.95	0.83	0.71	0.60	0.53	0.30	0.09
97	719.45	1.57	1.24	1.12	0.99	0.88	0.81	0.58	0.36
98	722.66	1.88	1.54	1.42	1.29	1.17	1.10	0.86	0.64
99	725.85	2.20	1.86	1.73	1.59	1.47	1.40	1.15	0.92
100	729.05	2.54	2.18	2.05	1.91	1.78	1.71	1.45	1.22
101	732.23	2.88	2.51	2.37	2.23	2.10	2.03	1.76	1.52
102	735.42	3.23	2.85	2.71	2.56	2.43	2.35	2.08	1.83
103	738.59	3.60	3.20	3.06	2.91	2.77	2.69	2.41	2.15
104	741.77	3.98	3.57	3.42	3.26	3.12	3.04	2.75	2.48
105	744.94	4.31	3.95	3.79	3.63	3.48	3.39	3.09	2.82
106	748.10	4.64	4.28	4.15	4.01	3.86	3.77	3.46	3.17
107	751.26	5.03	4.62	4.48	4.33	4.20	4.13	3.83	3.54
108	754.41	5.48	4.99	4.83	4.67	4.54	4.45	4.18	3.91
109	757.56	6.04	5.44	5.25	5.06	4.90	4.81	4.51	4.25
110	760.70	6.62	5.99	5.76	5.53	5.33	5.22	4.87	4.59
111	763.84	7.36	6.57	6.32	6.08	5.86	5.72	5.30	4.96
112	766.97	8.29	7.29	6.98	6.67	6.42	6.28	5.82	5.40
113	770.10	9.48	8.22	7.84	7.43	7.11	6.93	6.38	5.94
114	773.23	11.43	9.35	8.83	8.37	8.02	7.78	7.05	6.51

115	776.35	14.16	11.24	10.38	9.61	9.04	8.75	7.95	7.22
116	779.46	17.28	13.91	12.76	11.63	10.74	10.26	8.95	8.14
117	782.57	21.02	17.00	15.73	14.41	13.25	12.58	10.59	9.23
118	785.67	25.59	20.69	19.12	17.56	16.27	15.53	13.04	11.05
119	788.77	31.13	25.18	23.25	21.36	19.80	18.88	16.04	13.66
120	791.87	37.55	30.64	28.31	26.00	24.07	22.96	19.52	16.73
121	794.96	44.08	37.01	34.39	31.63	29.30	27.94	23.73	20.36
122	798.04	50.95	43.54	40.94	38.09	35.52	33.96	28.88	24.77
123	801.12	60.21	50.29	47.41	44.62	42.07	40.52	35.05	30.13
124	804.20	70.20	59.39	55.51	51.63	48.60	46.98	41.60	36.45
125	807.27	81.15	69.38	65.45	61.04	57.16	54.91	48.09	42.99
126	810.33	94.07	80.17	75.60	71.03	67.15	64.80	56.47	49.64
127	813.39	106.63	93.00	87.68	82.14	77.54	74.89	66.44	58.55

Use of the Absolute Responsivities

The net count rate from the IR spectrometer is related to the average brightness over the field of view of the instrument according to:

$$\text{Net DN/sec}(i) = \text{Rmeas}(\text{pixel } i, \text{Detector Temp. } T) * \langle I(\lambda) \rangle$$

Where $\langle I(\lambda) \rangle$ denotes the average intensity over the field of view of the detector in watts/sq.m-micron-sr. The units of Rmeas is (DN/sec)/(Watt/sq.m-micron-sr). To evaluate the average over the field of view of the instrument, the relative response across the field of view of the instrument is required.

5. Relative response over the fields of view of the ULIS and DLIS

5.1 Field of view of the ULIS

For the ULIS, the field of view covers approximately 170 degrees in azimuth and extends from zenith angles of 5 degrees to 90 degrees. The relative response is given in the table below.

Relative Spatial Response of ULIS (times 10,000)

AZ	ZA = 1	ZA = 2	ZA = 3	ZA = 4	ZA = 5	ZA = 6	ZA = 7	ZA = 8	ZA = 9	ZA = 10	ZA = 11	ZA = 12	ZA = 13	ZA = 14	ZA = 15
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-90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-89	0	0	0	1	1	2	2	2	2	5	5	6	6	7	1
-88	0	1	1	1	2	3	3	4	4	8	11	12	13	14	15
-87	0	1	1	2	3	4	5	5	6	17	32	32	33	30	17
-86	1	1	2	2	4	5	6	14	14	21	36	38	40	35	24
-85	1	2	2	3	4	13	14	15	16	24	41	58	58	52	26
-84	1	2	3	4	10	14	16	17	18	38	55	64	64	54	33
-83	1	2	3	4	11	15	17	19	29	41	59	69	81	61	35
-82	1	2	4	9	11	16	19	27	31	44	73	90	84	63	56
-81	1	3	4	10	12	17	27	29	34	58	76	95	94	92	85
-80	2	3	9	11	13	23	28	30	42	61	80	165	143	123	176
-79	2	3	10	11	14	24	29	39	45	64	107	208	328	247	224
-78	2	4	10	12	19	25	31	40	48	89	131	291	407	311	381
-77	2	4	10	12	20	26	37	42	66	110	218	349	486	539	449
-76	2	4	11	13	21	27	38	44	85	132	242	407	730	625	685
-75	2	9	11	18	21	33	39	69	104	216	265	629	809	875	825
-74	2	9	12	19	22	34	40	75	123	238	366	684	1102	1009	1081
-73	3	10	12	19	23	34	45	81	206	259	403	798	1181	1259	1173
-72	3	10	13	20	29	35	45	86	224	343	395	851	1425	1344	1434
-71	3	10	13	21	29	36	44	68	243	360	533	903	1503	1594	1527
-70	3	11	18	21	30	41	43	78	321	381	568	1119	1747	1679	1790
-69	3	11	18	22	31	41	41	98	340	465	602	1169	1826	1931	1933
-68	3	11	19	27	32	40	39	95	358	485	684	1382	1904	2062	2224
-67	3	11	19	27	32	40	39	104	440	505	728	1430	2027	2322	2338
-66	4	12	20	28	37	38	38	113	458	589	935	1371	2077	2417	2670
-65	4	12	20	28	37	36	37	122	475	608	871	1580	2291	2694	2789
-64	4	12	21	29	36	35	35	193	493	624	911	1624	2338	2792	3140
-63	4	13	21	30	35	35	34	201	574	707	1114	1831	2384	2910	3232
-62	4	13	21	30	35	34	33	208	517	726	1152	1873	2494	3170	3497
-61	4	13	22	31	34	34	33	148	524	745	1189	1807	2543	3250	3582
-60	9	18	27	36	32	31	35	218	595	846	1389	2013	2771	3509	3855
-59	9	18	27	35	31	30	28	224	601	871	1318	2055	2817	3474	3939
-58	9	18	27	35	31	30	28	229	607	860	1350	2096	2756	3702	4202
-57	9	19	28	35	31	29	27	234	613	878	1548	2316	2979	3749	4284
-56	9	19	28	34	30	28	27	238	615	1001	1584	2249	3021	3793	4553
-55	10	19	29	34	30	27	41	306	619	1023	1512	2286	3241	3911	4633
-54	10	19	29	34	29	25	42	243	623	1044	1703	2502	3174	3953	4712
-53	10	20	29	34	27	24	43	246	627	1042	1751	2536	3211	4172	4849
-52	10	20	30	33	26	24	44	249	693	1084	1797	2465	3419	4089	4890

-51	10	20	30	31	26	23	21	315	629	1125	1842	2772	3472	4146	5107
-50	10	20	30	31	26	23	42	316	631	1164	2122	2837	3509	4466	5140
-49	10	21	31	31	25	22	42	318	633	1383	2180	2901	3817	4540	5219
-48	10	21	35	30	25	19	43	252	711	1369	2237	3157	3884	4567	5483
-47	10	21	35	30	25	18	42	252	742	1404	2533	3218	3904	4877	5450
-46	11	21	35	30	25	18	42	316	706	1438	2464	3277	4208	4946	5539
-45	11	21	35	30	22	17	14	315	735	1654	2500	3529	4271	4968	5551
-44	11	22	35	29	22	17	38	314	763	1633	2534	3585	4286	5218	5516
-43	11	22	35	29	21	16	37	246	988	1663	2697	3640	4584	5182	5602
-42	11	22	34	29	21	16	36	244	1014	1691	2728	3584	4642	5190	5566
-41	11	27	34	27	21	13	35	320	973	1900	2757	3855	4652	5274	5574
-40	11	27	34	26	21	13	8	342	997	1875	2785	3885	4936	5236	5658
-39	11	27	34	26	20	13	8	362	1217	1900	2941	3912	4942	5242	5619
-38	11	27	34	26	20	12	27	315	1239	1923	2965	4069	4812	5324	5625
-37	12	27	34	26	20	12	25	334	1193	2075	2987	4093	4839	5283	5661
-36	12	28	34	26	18	12	22	351	1213	2095	2899	4116	5131	5287	5665
-35	12	28	33	25	17	11	20	566	1232	2114	3157	4027	5000	5405	5668
-34	12	28	33	25	17	11	2	514	1249	2132	3174	4045	5024	5440	5702
-33	12	28	31	25	17	7	3	529	1397	2067	3080	4297	5046	5474	5703
-32	12	28	31	25	17	8	4	543	1412	2293	3094	4199	5178	5542	5758
-31	12	28	31	25	16	9	16	556	1426	2307	3106	4207	5198	5653	5793
-30	12	29	31	24	15	18	49	575	1373	2245	3247	4105	5146	5720	5940
-29	12	29	30	24	16	20	74	801	1385	2258	3255	4330	5152	5753	5975
-28	12	29	30	20	16	21	98	829	1395	2270	3261	4333	5363	5785	6043
-27	12	29	30	20	17	23	122	856	1603	2281	3157	4225	5267	5928	6077
-26	12	29	30	21	18	25	145	889	1628	2421	3160	4225	5267	5959	6187
-25	12	29	30	21	26	27	174	914	1656	2429	3161	4223	5155	6024	6255
-24	13	29	30	22	28	36	195	938	1684	2436	3289	4110	5151	6055	6287
-23	13	30	30	22	36	42	216	962	1710	2465	3284	4324	5144	5954	6354
-22	13	30	30	31	38	44	236	992	1742	2493	3277	4208	5247	6225	6385
-21	13	30	30	32	39	46	452	1013	1766	2520	3288	4198	5237	6084	6518
-20	13	30	30	34	41	48	478	1231	1790	2553	3329	4187	5116	6092	6530
-19	13	30	28	35	42	56	495	1251	2016	2577	3368	4255	5102	6098	6578
-18	13	30	29	36	43	58	512	1278	2038	2799	3426	4301	5135	6013	6591
-17	13	30	29	37	52	60	528	1296	2058	2828	3706	4390	5183	5993	6638
-16	13	30	30	38	53	61	550	1313	2084	2849	3741	4653	5450	6071	6652
-15	13	30	30	39	55	63	565	1329	2102	2870	3780	4695	5539	6339	6680
-14	13	30	30	47	56	72	578	1352	2120	2896	3807	4779	5582	6430	6696
-13	13	30	31	49	58	74	591	1367	2136	2914	3838	4818	5669	6475	6760

-12	13	31	31	50	59	75	610	1380	2158	2931	3862	4852	5709	6563	6778
-11	13	31	32	51	67	77	621	1393	2172	2953	3884	4882	5792	6604	6840
-10	13	31	32	52	69	79	632	1412	2185	2968	3910	4910	5829	6688	6859
-9	13	31	43	53	70	87	641	1423	2205	2981	3929	4951	5865	6727	6924
-8	13	31	44	54	71	89	657	1433	2216	3000	3946	4969	5943	6807	6944
-7	13	31	45	62	73	90	665	1449	2226	3011	3967	4993	5975	6842	7009
-6	13	31	45	63	74	92	672	1457	2242	3021	3981	5007	6004	6919	7030
-5	13	31	46	64	82	94	678	1464	2250	3036	3999	5020	6026	6950	7095
-4	13	31	47	65	84	102	691	1470	2257	3044	4009	5038	6066	7024	7117
-3	13	31	48	66	85	104	696	1483	2270	3051	4018	5047	6076	7052	7183
-2	13	31	48	67	86	105	699	1487	2275	3063	4031	5061	6090	7083	7205
-1	13	31	49	68	88	107	702	1491	2279	3067	4036	5066	6096	7099	7272
0	13	31	55	69	89	108	902	1690	2479	3267	4297	5070	6358	7388	7264
1	13	31	58	77	97	117	713	1502	2290	3093	4109	5141	6173	7205	7348
2	13	31	58	78	98	118	713	1502	2291	3107	4125	5159	6192	7226	7417
3	13	31	59	79	100	120	713	1502	2290	3250	4232	5226	6261	7295	7440
4	13	31	60	80	101	121	712	1507	2296	3274	4253	5240	6276	7312	7507
5	13	31	61	81	102	130	717	1505	2293	3297	4272	5303	6341	7378	7535
6	13	31	61	82	110	131	714	1502	2290	3407	4367	5314	6352	7391	7614
7	13	31	62	83	111	132	710	1498	2294	3427	4391	5323	6413	7452	7643
8	13	31	63	91	112	134	706	1500	2299	3445	4502	5429	6420	7460	7722
9	13	31	63	92	113	135	708	1493	2303	3549	4523	5443	6477	7517	7751
10	13	31	64	93	115	143	701	1486	2428	3564	4543	5534	6480	7521	7832
11	13	31	64	94	116	145	694	1486	2440	3576	4649	5554	6482	7573	7861
12	13	31	64	94	124	146	687	1477	2450	3676	4666	5572	6587	7573	7942
13	13	31	64	95	125	147	685	1467	2546	3685	4681	5677	6595	7621	7973
14	13	30	64	96	126	148	675	1456	2553	3693	4782	5691	6689	7617	8054
15	13	30	64	104	127	157	665	1435	2558	3787	4794	5793	6703	7719	8086
16	13	30	65	105	128	158	654	1430	2562	3791	4893	5804	6804	7496	8206
17	13	30	65	105	129	159	649	1424	2652	3793	4902	5594	6595	7546	8231
18	13	30	65	106	137	160	637	1417	2652	3882	4689	5690	6604	7535	8298
19	13	30	65	107	137	161	623	1510	2651	3602	4783	5697	6637	7567	8330
20	13	30	67	108	138	169	609	1508	2459	3599	4787	5739	6623	7552	8406
21	13	30	67	108	139	170	601	1199	2454	3683	4790	5724	6652	7536	8438
22	13	30	66	109	140	171	388	1187	2448	3676	5146	5708	6635	7561	8268
23	13	30	66	107	141	172	371	1302	2529	3668	5187	5735	6440	7321	8247
24	13	30	65	107	149	168	354	1294	2520	3952	5228	5811	6419	7343	8268
25	13	29	65	107	150	176	335	1284	2509	4000	5290	6045	6397	7320	8242
26	12	29	64	107	137	177	323	1273	2497	4045	5340	6151	6749	7338	8259

27	12	29	64	107	137	178	303	1349	2786	4085	5387	6255	6793	7311	8010
28	12	29	63	107	137	179	283	1336	2544	4126	5707	6635	7120	7617	7979
29	12	29	62	95	137	180	262	1320	2579	4164	5750	6738	7244	7737	8341
30	12	29	62	94	136	180	240	1026	2611	4200	5790	6852	7354	7856	8387
31	12	29	61	94	138	178	192	1324	2917	4509	5824	7228	7739	8250	8771
32	12	28	61	93	137	178	208	1349	2945	4541	5859	7329	7848	8378	8896
33	12	28	60	92	136	178	208	1373	2971	4292	5891	7703	8243	8770	8987
34	12	28	47	91	135	166	207	1394	2908	4594	6196	7520	8349	8885	8999
35	12	28	47	90	133	165	164	1566	2913	4619	6224	7550	8455	8998	9041
36	12	28	46	89	132	164	169	1233	2915	4641	5970	7852	8835	9052	9053
37	12	28	45	88	119	162	172	1217	2915	4661	6164	7877	8949	9063	9065
38	12	27	44	87	118	161	176	1199	3115	4477	6162	7898	9052	9093	9107
39	11	27	44	86	117	159	195	1374	3093	4453	6157	7729	9162	9169	9118
40	11	27	43	85	115	157	194	1352	2709	4426	5979	7697	9185	9194	9210
41	11	27	42	84	114	156	173	1329	2683	4591	5947	7663	8757	9278	9283
42	11	22	41	71	113	145	173	1112	2848	4200	5912	7266	8732	9369	9325
43	11	22	40	70	111	144	174	1114	2817	4166	5874	7245	8643	9408	9427
44	11	22	40	69	110	143	173	1309	2425	4129	5669	7161	8193	9508	9521
45	11	22	39	68	108	142	178	1308	2390	4284	5626	7074	8160	9187	9624
46	11	21	38	66	95	140	161	1305	2352	3884	5581	6687	8064	9144	9665
47	11	21	37	65	93	139	159	1099	2507	3840	5588	6596	7606	9038	9759
48	10	21	36	64	92	138	156	1094	2465	3794	5143	6503	7566	8571	9862
49	10	21	31	63	90	127	152	1282	2240	3939	5056	6109	7463	8520	9519
50	10	21	31	61	89	126	148	1274	2231	3529	4966	6012	6998	8407	9398
51	10	20	30	60	87	124	159	1265	2221	3476	4641	5912	7031	8019	9428
52	10	20	30	47	86	123	129	1052	2403	3420	4564	5542	6941	7922	9020
53	10	20	30	46	84	121	123	1040	2187	3362	4486	5564	6546	7950	8936
54	10	20	29	44	74	120	116	1027	2172	3097	4405	5494	6471	7571	8558
55	10	19	29	43	72	106	109	1206	2156	3035	4033	5124	6515	7487	8439
56	10	19	29	42	71	105	141	987	2138	2972	4087	5050	6137	7225	8318
57	9	19	28	40	70	106	139	970	2110	2721	4018	5096	6055	7137	7920
58	9	19	28	39	68	104	137	951	2089	2662	3618	4720	5672	7046	7795
59	9	18	27	37	67	102	135	932	2067	2574	3537	4641	5708	6655	7370
60	9	18	27	36	65	101	54	910	2043	2506	3575	4559	5619	6565	7242
61	4	13	22	31	52	87	122	685	1815	2279	3168	4147	5230	6146	6838
62	4	13	22	30	50	85	120	855	1788	2217	3081	4174	5138	6023	6706
63	4	13	21	30	49	83	118	830	1757	2154	2993	4077	4841	5456	6180
64	4	12	21	29	47	81	115	803	1497	1888	2580	3656	4734	5223	6021
65	4	12	20	29	48	79	101	572	1439	1826	2488	3556	4625	5021	5245

66	4	12	20	28	47	65	99	543	1381	1761	2516	3131	4192	4443	4974
67	4	12	20	28	39	66	96	513	1323	1494	2097	3148	4079	4250	4240
68	3	11	19	27	39	64	94	481	1061	1428	2000	3042	3507	3755	4002
69	3	11	19	22	38	62	95	179	1002	1362	1550	2612	3350	3466	3407
70	3	11	18	21	37	60	80	405	942	1093	1463	2502	3193	2979	3115
71	3	10	13	21	36	52	78	370	681	1026	1375	2068	2713	2809	2586
72	3	10	13	20	35	51	75	113	621	960	1096	1955	2556	2317	2401
73	3	10	12	20	29	50	73	92	560	690	995	1840	2076	2147	1897
74	2	9	12	19	28	49	65	71	296	622	905	1523	1919	1655	1714
75	2	9	12	18	27	48	64	49	234	553	670	1405	1324	1370	1210
76	2	4	11	13	26	41	62	72	172	281	594	963	1167	878	912
77	2	4	11	13	25	40	61	69	110	212	518	842	687	708	584
78	2	4	10	12	24	39	49	67	78	142	238	720	531	395	468
79	2	3	10	11	17	38	48	64	74	87	161	262	375	287	254
80	2	3	9	11	16	37	46	51	70	83	96	157	224	150	191
81	1	3	4	10	15	27	44	48	52	79	91	101	149	126	111
82	1	3	4	10	14	26	32	45	49	61	87	95	96	87	95
83	1	2	3	4	13	24	29	32	45	57	69	75	90	82	73
84	1	2	3	4	12	23	26	29	31	53	64	68	71	65	67
85	1	2	2	3	5	22	24	26	28	35	43	62	64	60	51
86	1	1	2	3	4	8	11	23	24	31	38	40	43	44	45
87	0	1	1	2	3	6	8	9	10	26	32	34	36	37	28
88	0	1	1	1	2	4	5	6	7	8	12	13	14	15	22
89	0	0	0	1	1	2	3	3	3	4	6	6	7	7	7
90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 17b.
Relative Spatial Response of ULIS (times 10,000)

AZ	ZA = 16	ZA = 17	ZA = 18	ZA = 19	ZA = 20	ZA = 21	ZA = 22	ZA = 23	ZA = 24	ZA = 25	ZA = 26	ZA = 27	ZA = 28	ZA = 29	ZA = 30
-90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-89	0	0	0	1	6	4	4	4	5	5	4	9	9	10	10
-88	2	2	2	5	15	15	13	14	14	15	14	18	19	19	20
-87	2	2	2	13	27	28	25	23	24	25	24	28	28	29	29
-86	2	3	8	18	32	41	38	35	34	34	34	43	42	57	65
-85	4	6	16	30	45	47	55	71	69	87	101	185	175	157	167
-84	8	9	20	56	92	115	135	254	244	223	240	319	275	256	269
-83	14	29	57	107	249	290	313	337	380	359	379	454	375	356	415
-82	45	62	159	234	320	464	492	501	516	495	517	552	476	456	512

-81	128	162	224	407	489	539	670	674	582	630	644	651	577	555	585
-80	163	273	379	472	657	714	844	807	719	766	775	750	678	646	672
-79	284	337	548	637	727	887	913	941	856	898	895	872	803	782	782
-78	348	508	609	801	894	1061	1082	1105	1022	1025	992	980	962	1035	992
-77	525	566	769	854	1050	1136	1248	1168	1159	1081	1138	1266	1243	1297	1207
-76	598	727	818	1017	1217	1309	1379	1302	1322	1285	1418	1552	1529	1558	1481
-75	898	1010	1000	1178	1284	1469	1440	1482	1613	1559	1697	1836	1829	1863	1787
-74	1162	1121	1298	1285	1475	1649	1631	1770	1747	1876	1999	2003	2086	2126	2176
-73	1268	1419	1427	1616	1825	1769	1942	2086	2066	2153	2277	2273	2342	2388	2442
-72	1561	1552	1773	1995	2031	2123	2222	2217	2354	2430	2554	2549	2599	2692	2729
-71	1679	1914	2182	2199	2388	2407	2347	2503	2624	2707	2854	2843	2898	2909	2824
-70	1998	2078	2336	2585	2700	2536	2626	2785	2938	3027	2988	3094	3093	2977	2920
-69	2152	2442	2722	2937	2823	2821	2934	3096	3209	3161	3252	3275	3198	3089	3039
-68	2503	2824	2867	3059	3174	3179	3213	3380	3337	3437	3499	3379	3261	3157	3130
-67	2635	2960	3237	3443	3452	3463	3335	3502	3650	3678	3559	3441	3324	3246	3249
-66	2999	3338	3612	3559	3575	3592	3612	3809	3856	3738	3620	3503	3431	3363	3340
-65	3144	3456	3741	3831	3853	3950	3978	4031	3914	3797	3724	3608	3500	3452	3459
-64	3458	3776	4074	4101	4204	4227	4215	4088	4022	3900	3786	3671	3611	3569	3529
-63	3555	3880	4183	4280	4311	4314	4290	4136	4048	3937	3867	3778	3676	3646	3547
-62	3825	4163	4439	4523	4512	4494	4325	4163	4074	4014	3928	3818	3789	3664	3538
-61	3924	4260	4528	4601	4695	4542	4360	4242	4132	4044	3956	3898	3792	3655	3557
-60	4195	4524	4734	4794	4724	4564	4437	4270	4161	4103	4016	3916	3812	3686	3550
-59	4284	4609	4936	4919	4768	4645	4473	4307	4210	4133	4042	3937	3805	3679	3570
-58	4553	4878	4989	4947	4844	4670	4510	4396	4239	4154	4076	3929	3827	3699	3563
-57	4648	4958	5111	5035	4883	4752	4589	4434	4326	4202	4068	3951	3821	3721	3597
-56	4910	5167	5179	5059	4964	4789	4626	4515	4349	4195	4090	3957	3844	3716	3619
-55	4994	5238	5221	5130	4987	4816	4704	4530	4391	4230	4084	3980	3851	3740	3613
-54	5252	5362	5283	5147	5012	4886	4716	4552	4393	4263	4119	3974	3875	3735	3632
-53	5318	5385	5303	5164	5058	4893	4747	4566	4443	4262	4143	3998	3871	3769	3627
-52	5541	5453	5315	5209	5062	4942	4750	4609	4443	4301	4138	4035	3895	3789	3648
-51	5601	5465	5352	5213	5108	4921	4776	4621	4482	4315	4174	4031	3915	3781	3680
-50	5614	5501	5363	5259	5108	4965	4782	4662	4495	4356	4188	4056	3922	3802	3677
-49	5615	5511	5401	5263	5152	4950	4835	4663	4536	4352	4218	4063	3943	3838	3699
-48	5664	5515	5412	5275	5147	5004	4841	4708	4519	4385	4197	4081	3965	3832	3721
-47	5669	5561	5424	5315	5193	5011	4879	4686	4552	4363	4233	4099	3973	3854	3756
-46	5719	5572	5464	5328	5181	5060	4857	4719	4530	4397	4252	4106	3993	3877	3754
-45	5731	5615	5476	5363	5236	5043	4897	4698	4564	4409	4240	4126	4012	3888	3776
-44	5736	5628	5516	5372	5231	5083	4876	4736	4574	4398	4279	4145	4021	3908	3789
-43	5787	5635	5529	5409	5271	5062	4916	4751	4555	4436	4299	4154	4041	3928	3817

-42	5793	5687	5574	5419	5250	5102	4897	4734	4598	4457	4308	4174	4062	3959	3803
-41	5845	5701	5589	5438	5291	5082	4938	4774	4623	4466	4329	4195	4099	3942	3812
-40	5859	5747	5643	5444	5271	5124	4954	4758	4634	4491	4370	4237	4092	3951	3839
-39	5904	5762	5644	5488	5313	5105	4962	4802	4660	4537	4362	4228	4124	3984	3848
-38	5918	5808	5690	5470	5294	5148	4979	4847	4672	4531	4389	4271	4134	3994	3881
-37	5933	5824	5670	5515	5339	5165	4988	4840	4699	4577	4436	4287	4145	4028	3865
-36	5978	5878	5718	5498	5349	5174	5008	4886	4746	4597	4448	4324	4153	4014	3876
-35	5994	5884	5727	5544	5369	5221	5054	4906	4757	4605	4456	4311	4168	4049	3912
-34	5941	5932	5747	5592	5380	5206	5038	4914	4766	4617	4469	4349	4207	4065	3925
-33	6056	5941	5757	5574	5428	5254	5073	4926	4802	4654	4507	4365	4223	4104	3962
-32	5990	5962	5806	5624	5449	5276	5119	4962	4815	4667	4546	4404	4263	4114	3965
-31	5998	5972	5789	5636	5461	5286	5093	4971	4824	4677	4534	4393	4266	4144	3999
-30	6083	6022	5840	5658	5511	5334	5142	4984	4838	4716	4573	4423	4274	4124	4011
-29	6180	6033	5852	5671	5497	5312	5186	5021	4876	4730	4575	4426	4304	4156	4022
-28	6226	6055	5874	5722	5547	5361	5168	5008	4887	4764	4606	4457	4309	4161	4035
-27	6237	6067	5888	5746	5598	5410	5215	5046	4901	4743	4638	4489	4341	4196	4069
-26	6282	6118	5939	5761	5585	5390	5266	5085	4941	4780	4620	4495	4347	4230	4095
-25	6269	6132	5954	5814	5634	5441	5247	5073	4981	4819	4653	4505	4381	4229	4096
-24	6315	6155	5978	5829	5687	5492	5299	5112	4968	4826	4660	4539	4392	4261	4122
-23	6328	6169	6031	5854	5657	5507	5351	5165	5007	4838	4699	4547	4399	4263	4148
-22	6375	6217	6046	5871	5710	5517	5334	5213	5046	4878	4738	4582	4433	4295	4149
-21	6388	6231	6100	5925	5723	5561	5380	5199	5055	4887	4751	4618	4468	4307	4177
-20	6411	6255	6116	5981	5775	5574	5425	5244	5091	4928	4762	4627	4473	4312	4211
-19	6424	6305	6143	5969	5829	5619	5439	5290	5101	4965	4804	4668	4509	4349	4215
-18	6473	6320	6198	6023	5805	5631	5452	5337	5146	4976	4841	4683	4546	4386	4250
-17	6487	6370	6215	6077	5860	5646	5498	5318	5151	4980	4845	4718	4576	4424	4288
-16	6536	6385	6267	6094	5916	5703	5545	5365	5196	5016	4881	4722	4572	4422	4290
-15	6551	6435	6284	6149	5934	5758	5562	5412	5212	5052	4894	4758	4606	4449	4318
-14	6580	6427	6337	6167	5991	5815	5610	5460	5261	5098	4931	4795	4618	4478	4346
-13	6597	6483	6368	6183	6008	5796	5667	5477	5310	5143	4969	4832	4654	4507	4376
-12	6653	6539	6388	6228	6028	5854	5684	5487	5321	5124	4976	4870	4692	4543	4406
-11	6671	6558	6446	6241	6071	5902	5705	5537	5371	5174	5015	4871	4695	4544	4405
-10	6727	6616	6466	6297	6114	5917	5749	5576	5391	5226	5065	4887	4734	4582	4436
-9	6791	6635	6525	6350	6128	5960	5793	5588	5426	5265	5104	4926	4774	4622	4474
-8	6811	6693	6584	6370	6171	6004	5837	5632	5462	5301	5140	4953	4803	4654	4504
-7	6874	6713	6605	6428	6227	6021	5854	5675	5498	5337	5155	4988	4830	4681	4532
-6	6897	6772	6665	6487	6246	6065	5900	5721	5541	5353	5193	5023	4857	4708	4560
-5	6964	6837	6687	6509	6303	6111	5946	5768	5558	5390	5231	5062	4893	4737	4588
-4	6987	6860	6747	6569	6364	6168	5993	5787	5604	5428	5270	5101	4928	4765	4617

-3	7054	6925	6808	6630	6388	6190	6012	5835	5652	5474	5309	5141	4968	4801	4647
-2	7078	6950	6830	6653	6451	6248	6060	5883	5702	5520	5349	5181	5009	4837	4677
-1	7146	7020	6899	6715	6514	6312	6119	5932	5751	5571	5396	5222	5051	4879	4714
0	7139	7015	6890	6690	6489	6289	6088	5909	5729	5549	5369	5199	5028	4858	4687
1	7225	7101	6978	6788	6589	6389	6190	5991	5812	5633	5453	5270	5100	4930	4760
2	7279	7157	7035	6844	6639	6440	6242	6039	5850	5672	5493	5307	5129	4960	4790
3	7299	7178	7057	6866	6689	6492	6294	6087	5889	5711	5533	5345	5160	4990	4821
4	7354	7235	7115	6923	6711	6515	6318	6141	5938	5751	5574	5387	5199	5022	4853
5	7375	7256	7173	6983	6770	6567	6372	6167	5987	5792	5616	5429	5239	5054	4886
6	7450	7313	7196	7009	6828	6621	6426	6223	6015	5843	5658	5473	5283	5095	4919
7	7475	7370	7254	7071	6856	6681	6481	6279	6072	5869	5701	5516	5327	5138	4952
8	7550	7393	7278	7133	6919	6708	6507	6336	6130	5924	5723	5561	5372	5184	4997
9	7581	7471	7337	7160	6983	6771	6563	6393	6189	5984	5782	5594	5403	5213	5022
10	7663	7499	7396	7223	7013	6837	6629	6422	6230	6022	5813	5624	5430	5239	5049
11	7745	7578	7421	7287	7078	6868	6678	6456	6248	6054	5846	5642	5457	5267	5077
12	7778	7613	7505	7316	7128	6915	6701	6500	6280	6086	5879	5727	5540	5344	5154
13	7861	7698	7536	7362	7150	6959	6803	6606	6377	6160	5966	5761	5575	5377	5184
14	7893	7757	7632	7472	7250	7039	6849	6633	6420	6193	6001	5796	5610	5411	5214
15	7996	7825	7682	7499	7301	7084	6895	6682	6470	6240	6036	5831	5633	5448	5250
16	8017	7875	7705	7553	7327	7131	6921	6731	6499	6288	6059	5867	5670	5486	5288
17	8065	7897	7756	7581	7381	7185	6969	6781	6550	6341	6110	5967	5759	5562	5359
18	8087	7947	7780	7636	7438	7214	7018	6867	6664	6455	6225	6002	5780	5580	5378
19	8161	7970	7832	7692	7529	7332	7135	6917	6717	6488	6262	6026	5809	5599	5397
20	8190	8021	7930	7766	7587	7392	7169	6976	6749	6522	6295	6059	5839	5629	5469
21	8329	8156	7956	7819	7646	7424	7230	7014	6781	6555	6391	6155	5932	5719	5500
22	8364	8193	8032	7873	7678	7485	7270	7098	6872	6649	6416	6191	5967	5746	5533
23	8444	8275	8065	7901	7737	7586	7354	7128	6904	6682	6452	6227	6003	5782	5629
24	8480	8313	8146	8042	7832	7608	7384	7160	6936	6707	6486	6324	6101	5878	5667
25	8560	8459	8294	8084	7871	7638	7415	7192	7022	6801	6581	6360	6131	5916	5690
26	8661	8498	8335	8130	7911	7679	7501	7278	7056	6835	6616	6389	6169	5992	5766
27	8742	8582	8387	8156	8003	7774	7543	7312	7090	6870	6705	6486	6247	6007	5782
28	8779	8621	8413	8261	8046	7819	7586	7356	7194	6959	6741	6503	6262	6021	5797
29	8861	8731	8517	8303	8089	7865	7687	7455	7226	6995	6759	6519	6338	6097	5868
30	8990	8756	8544	8331	8182	7965	7735	7505	7274	7088	6840	6596	6355	6115	5889
31	8941	8804	8585	8438	8226	8012	7784	7623	7374	7112	6861	6618	6378	6198	5961
32	8953	8832	8685	8467	8257	8046	7887	7659	7400	7140	6951	6706	6463	6218	5979
33	8985	8951	8734	8519	8373	8157	7937	7685	7494	7234	6976	6733	6489	6308	6064
34	9009	8982	8767	8621	8425	8212	7969	7779	7520	7262	7002	6823	6580	6336	6072
35	9041	9034	8889	8676	8462	8317	8059	7807	7549	7358	7100	6851	6609	6412	6140

36	9053	9065	8924	8732	8588	8351	8081	7895	7642	7389	7132	6945	6688	6417	6146
37	9096	9098	8978	8837	8627	8380	8180	7917	7666	7480	7227	6975	6710	6503	6216
38	9109	9111	9082	8894	8660	8479	8211	8010	7756	7505	7254	7045	6773	6510	6303
39	9121	9155	9137	9000	8758	8510	8314	8034	7785	7601	7331	7045	6830	6569	6305
40	9219	9168	9182	9036	8789	8610	8347	8059	7877	7628	7417	7132	6829	6567	6364
41	9247	9299	9274	9065	8888	8642	8451	8169	7908	7703	7419	7135	6915	6626	6364
42	9340	9346	9306	9156	8920	8744	8481	8201	8001	7725	7487	7204	6920	6706	6424
43	9437	9454	9391	9183	9020	8778	8592	8313	8005	7789	7512	7271	6991	6707	6506
44	9542	9554	9416	9288	9053	8881	8624	8421	8108	7789	7574	7295	7056	6775	6506
45	9639	9601	9500	9322	9139	8916	8737	8435	8189	7873	7573	7358	7080	6830	6536
46	9683	9692	9526	9416	9164	9011	8770	8539	8195	7949	7659	7421	7144	6850	6580
47	9788	9717	9611	9445	9278	9041	8885	8545	8301	7958	7723	7447	7199	6900	6663
48	9885	9748	9637	9532	9317	9128	8881	8643	8310	8066	7725	7512	7220	6952	6653
49	9935	9826	9664	9561	9431	9154	8962	8637	8401	8068	7830	7562	7273	7038	6707
50	9984	9852	9750	9642	9472	9276	8951	8726	8461	8160	7894	7581	7310	7018	6746
51	10000	9923	9778	9678	9564	9283	9025	8783	8485	8219	7920	7627	7325	7052	6818
52	9989	9944	9850	9760	9600	9391	9101	8807	8543	8245	7969	7715	7358	7125	6797
53	9687	9939	9874	9780	9690	9383	9138	8856	8633	8305	8057	7700	7407	7160	6832
54	9581	9931	9902	9835	9648	9459	9195	8878	8629	8398	8107	7751	7498	7141	6908
55	9184	9781	9890	9849	9668	9419	9218	8951	8720	8449	8094	7842	7540	7233	6930
56	9054	9679	9870	9834	9657	9401	9162	8973	8722	8422	8171	7873	7562	7260	7001
57	8625	9343	9840	9825	9609	9394	9155	8905	8719	8499	8198	7890	7587	7333	7022
58	8515	9206	9628	9741	9607	9328	9079	8898	8623	8423	8270	7914	7661	7355	6989
59	8082	8794	9547	9713	9531	9313	9073	8833	8604	8382	8240	7989	7688	7379	7065
60	7945	8649	9298	9486	9489	9263	9069	8827	8490	8316	8189	8016	7764	7455	7090
61	7508	8204	8892	9106	9461	9256	8994	8811	8473	8202	8073	7993	7776	7409	7149
62	7391	8054	8735	8965	9158	9232	8991	8713	8373	8128	8006	7876	7791	7467	7141
63	6862	7548	8283	8512	8716	8884	8987	8700	8359	8021	7940	7833	7573	7458	7195
64	6693	7367	7938	8156	8517	8726	8916	8592	8335	7988	7850	7649	7410	7323	7189
65	6027	6733	7304	7549	7758	8094	8294	8581	8238	7883	7785	7557	7198	7098	7068
66	5705	6485	7030	6914	7108	7306	7558	8034	8227	7884	7671	7360	7112	6935	6839
67	4887	5600	6213	6648	6828	7011	6893	7270	7736	7873	7607	7271	6913	6710	6673
68	4584	5289	5436	5876	6176	6345	6597	6960	6957	7328	7531	7184	6823	6547	6444
69	3837	4423	5114	5603	5391	5545	5930	6278	6631	6645	6975	6991	6735	6379	6279
70	3504	3638	4223	4865	5109	4877	5176	5510	5933	6315	6282	6508	6541	6169	6013
71	2816	3285	3875	3985	4460	4580	4507	4855	5209	5582	5936	5799	6015	6088	5834
72	2573	2575	3033	3553	3673	3912	4206	4199	4555	4914	5133	4982	5183	5496	5656
73	2012	2304	2369	2787	3254	3188	3572	3906	3899	4244	4437	4270	4533	4808	4971
74	1803	1711	2115	2249	2682	2910	2875	3200	3179	3573	3739	3636	3898	4198	4333

75	1261	1497	1653	2045	2269	2560	2422	2556	2870	2786	3012	3257	3299	3587	3402
76	791	1080	1274	1711	2150	2232	2268	2123	2211	2175	2400	2669	2649	2869	2664
77	666	776	1206	1414	1846	1904	1933	1780	1811	1746	1824	2080	2048	2243	2115
78	355	675	914	1339	1582	1696	1597	1619	1564	1628	1491	1491	1446	1616	1592
79	257	413	804	1040	1277	1368	1199	1302	1318	1341	1249	1227	1087	1126	1121
80	175	316	511	740	1153	1040	1046	1047	1095	1104	957	929	910	940	923
81	147	157	233	622	845	713	811	828	871	868	715	761	768	796	800
82	92	93	138	320	537	568	571	608	766	632	541	601	626	651	704
83	76	75	75	112	410	345	356	389	541	396	371	462	483	505	602
84	61	61	54	58	97	113	141	288	316	239	235	322	341	359	378
85	46	57	50	43	36	36	45	68	91	83	98	183	198	213	229
86	41	42	41	34	27	32	31	30	31	32	32	43	55	67	80
87	26	27	28	30	23	22	21	21	22	23	23	28	29	30	30
88	20	21	22	21	13	12	12	13	13	13	14	19	19	20	20
89	5	6	6	6	5	4	4	4	4	4	5	9	10	10	10
90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 17c.
Relative Spatial Response of ULIS (times 10,000)

AZ	ZA = 31	ZA = 32	ZA = 33	ZA = 34	ZA = 35	ZA = 36	ZA = 37	ZA = 38	ZA = 39	ZA = 40	ZA = 41	ZA = 42	ZA = 43	ZA = 44	ZA = 45
-90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-89	10	10	10	11	11	11	11	12	14	20	13	14	14	14	15
-88	20	20	21	21	22	22	28	34	42	50	39	33	33	34	34
-87	30	30	31	37	40	43	46	55	63	81	70	52	52	53	54
-86	74	70	71	80	83	87	87	84	93	102	93	83	71	72	74
-85	179	194	144	122	127	150	133	105	123	132	124	107	98	92	93
-84	318	269	221	205	189	195	198	172	145	162	156	139	131	114	109
-83	392	345	331	284	235	257	245	220	213	186	192	198	204	264	182
-82	466	421	408	363	351	304	292	310	313	387	352	424	434	486	415
-81	541	530	486	478	465	467	510	516	601	575	574	645	659	692	608
-80	630	645	634	722	713	781	704	792	869	795	791	807	878	882	803
-79	871	864	955	950	1036	976	975	989	1027	1015	949	1027	1103	1054	1025
-78	1086	1083	1178	1178	1260	1250	1167	1253	1271	1204	1196	1251	1258	1244	1219
-77	1299	1398	1401	1500	1486	1481	1476	1435	1429	1423	1420	1411	1459	1435	1412
-76	1566	1622	1638	1732	1756	1676	1664	1648	1645	1585	1584	1634	1675	1654	1634
-75	1839	1892	1952	1947	1938	1908	1879	1833	1831	1832	1834	1846	1862	1842	1748
-74	2111	2170	2209	2174	2121	2095	2069	2048	2050	2054	1999	2002	1997	1902	1817
-73	2383	2429	2355	2328	2318	2247	2225	2205	2210	2244	2222	2124	2037	1942	1884

-72	2648	2528	2462	2454	2447	2469	2464	2458	2450	2347	2244	2160	2104	2017	1982
-71	2745	2628	2613	2608	2604	2600	2598	2569	2469	2394	2294	2213	2138	2059	2079
-70	2883	2812	2789	2734	2733	2732	2707	2599	2516	2415	2324	2273	2201	2144	2085
-69	2981	2914	2913	2939	2930	2816	2702	2607	2556	2463	2377	2304	2222	2164	2105
-68	3079	3062	3063	3045	2931	2817	2730	2641	2572	2487	2436	2334	2237	2170	2125
-67	3217	3183	3159	3073	2959	2846	2736	2656	2609	2535	2433	2331	2261	2194	2132
-66	3320	3301	3188	3074	2961	2875	2762	2693	2621	2551	2454	2347	2270	2220	2152
-65	3414	3302	3190	3104	2991	2872	2778	2724	2634	2540	2469	2371	2295	2226	2164
-64	3405	3319	3212	3106	2988	2903	2808	2718	2641	2555	2468	2388	2319	2238	2170
-63	3424	3314	3207	3114	3006	2900	2822	2725	2637	2570	2477	2395	2331	2243	2168
-62	3419	3333	3225	3109	3026	2922	2818	2741	2652	2560	2493	2408	2320	2257	2176
-61	3439	3329	3244	3129	3025	2944	2832	2737	2669	2576	2486	2413	2333	2263	2190
-60	3460	3350	3240	3152	3047	2943	2856	2754	2660	2588	2499	2426	2347	2278	2195
-59	3456	3347	3261	3146	3067	2956	2855	2776	2672	2601	2502	2440	2354	2276	2205
-58	3478	3367	3254	3162	3061	2972	2871	2793	2685	2595	2516	2430	2367	2279	2217
-57	3475	3385	3272	3180	3078	2967	2889	2780	2702	2599	2531	2444	2377	2289	2220
-56	3493	3378	3290	3176	3095	2985	2907	2799	2721	2613	2546	2454	2378	2300	2232
-55	3511	3397	3310	3195	3091	3004	2905	2818	2719	2632	2532	2465	2389	2312	2243
-54	3517	3416	3307	3215	3110	3017	2920	2832	2735	2647	2543	2476	2401	2315	2255
-53	3537	3411	3327	3212	3123	3031	2935	2847	2750	2665	2561	2488	2396	2328	2256
-52	3557	3432	3348	3226	3137	3026	2950	2842	2766	2683	2579	2495	2408	2338	2267
-51	3554	3464	3344	3240	3152	3041	2965	2858	2775	2701	2598	2511	2420	2343	2268
-50	3575	3485	3359	3269	3143	3057	2981	2872	2798	2712	2608	2522	2447	2344	2268
-49	3598	3481	3374	3284	3159	3083	2974	2880	2808	2705	2619	2532	2458	2354	2269
-48	3607	3493	3401	3277	3175	3100	2983	2889	2818	2716	2630	2544	2470	2366	2279
-47	3627	3505	3413	3293	3192	3114	2992	2898	2827	2728	2642	2549	2473	2366	2276
-46	3639	3534	3406	3307	3224	3103	3001	2919	2837	2736	2637	2544	2468	2375	2280
-45	3653	3524	3419	3335	3236	3113	3011	2929	2847	2735	2636	2556	2463	2373	2285
-44	3684	3538	3433	3349	3242	3124	3037	2940	2856	2736	2637	2556	2459	2379	2304
-43	3674	3553	3462	3362	3227	3146	3049	2951	2856	2737	2654	2557	2462	2384	2310
-42	3689	3585	3477	3369	3254	3153	3057	2961	2858	2773	2656	2559	2462	2386	2316
-41	3717	3601	3491	3375	3262	3161	3065	2961	2878	2775	2674	2561	2463	2386	2318
-40	3726	3613	3518	3383	3271	3170	3089	2981	2879	2778	2677	2579	2465	2398	2331
-39	3735	3641	3506	3392	3280	3194	3095	2982	2879	2780	2680	2599	2500	2410	2342
-38	3763	3628	3510	3420	3307	3203	3096	2983	2880	2798	2700	2602	2503	2411	2342
-37	3753	3633	3533	3426	3318	3212	3098	3004	2899	2800	2700	2603	2507	2413	2338
-36	3782	3661	3538	3431	3324	3234	3121	3007	2901	2802	2701	2604	2509	2435	2350
-35	3792	3667	3543	3455	3349	3234	3124	3010	2903	2803	2721	2623	2528	2446	2357
-34	3820	3695	3572	3461	3354	3232	3144	3034	2924	2824	2723	2639	2545	2446	2354

-33	3827	3703	3579	3486	3377	3255	3143	3035	2927	2841	2741	2641	2547	2445	2368
-32	3837	3732	3608	3493	3377	3256	3143	3035	2961	2859	2763	2663	2567	2465	2366
-31	3871	3743	3617	3501	3401	3279	3164	3071	2959	2855	2761	2667	2567	2480	2380
-30	3905	3778	3650	3525	3403	3281	3165	3072	2957	2851	2776	2683	2595	2500	2399
-29	3918	3792	3658	3529	3428	3307	3205	3093	2979	2867	2774	2690	2583	2493	2402
-28	3953	3819	3684	3556	3433	3310	3208	3093	2978	2864	2783	2704	2596	2501	2418
-27	3934	3819	3685	3562	3462	3358	3235	3115	3001	2902	2800	2696	2586	2498	2408
-26	3961	3846	3713	3590	3468	3356	3221	3111	3001	2903	2798	2711	2612	2507	2417
-25	3962	3847	3742	3620	3495	3370	3239	3129	3033	2923	2813	2715	2605	2497	2416
-24	3989	3875	3749	3614	3492	3357	3235	3126	3052	2942	2845	2733	2622	2524	2427
-23	4016	3902	3765	3630	3508	3372	3254	3158	3048	2939	2841	2730	2631	2520	2419
-22	4017	3903	3757	3617	3524	3389	3273	3177	3068	2971	2861	2750	2651	2536	2439
-21	4045	3930	3781	3640	3516	3379	3283	3174	3065	2969	2858	2758	2642	2538	2431
-20	4073	3957	3807	3665	3541	3404	3298	3194	3099	2990	2889	2774	2670	2555	2459
-19	4076	3953	3804	3677	3537	3426	3310	3208	3114	3010	2905	2790	2686	2573	2477
-18	4105	3981	3832	3703	3563	3438	3301	3207	3105	3006	2894	2791	2679	2579	2473
-17	4135	4010	3861	3731	3590	3465	3325	3220	3118	3019	2907	2804	2693	2595	2500
-16	4139	4039	3890	3760	3617	3492	3350	3234	3141	3032	2929	2818	2715	2609	2515
-15	4168	4031	3890	3760	3615	3490	3365	3226	3133	3021	2918	2816	2705	2611	2507
-14	4195	4050	3910	3783	3656	3518	3393	3253	3147	3044	2933	2830	2729	2626	2528
-13	4223	4076	3930	3802	3675	3538	3415	3293	3162	3059	2957	2845	2744	2647	2538
-12	4253	4102	3950	3823	3696	3557	3434	3312	3180	3071	2969	2868	2760	2657	2554
-11	4246	4097	3952	3813	3686	3590	3454	3332	3210	3081	2980	2878	2777	2667	2565
-10	4277	4128	3981	3834	3708	3581	3456	3323	3201	3081	2966	2865	2762	2660	2551
-9	4308	4159	4010	3856	3730	3604	3478	3343	3222	3100	2984	2876	2774	2671	2569
-8	4340	4191	4043	3898	3753	3627	3501	3377	3244	3122	3003	2895	2793	2684	2581
-7	4363	4216	4069	3922	3776	3651	3525	3400	3278	3157	3024	2908	2806	2703	2601
-6	4390	4239	4093	3946	3814	3676	3550	3424	3294	3174	3054	2929	2819	2716	2614
-5	4418	4263	4117	3970	3839	3714	3576	3436	3308	3188	3068	2944	2830	2728	2622
-4	4447	4291	4141	3995	3865	3740	3604	3457	3322	3203	3082	2953	2839	2735	2633
-3	4477	4320	4167	4021	3891	3766	3618	3471	3345	3225	3097	2963	2848	2743	2641
-2	4508	4351	4196	4047	3918	3779	3633	3486	3360	3235	3107	2979	2863	2755	2653
-1	4539	4383	4227	4074	3943	3794	3648	3502	3375	3246	3118	2990	2874	2765	2662
0	4532	4376	4221	4065	3919	3773	3627	3481	3353	3225	3097	2969	2858	2747	2646
1	4607	4448	4293	4138	3990	3844	3698	3548	3406	3274	3147	3019	2903	2792	2684
2	4634	4471	4316	4161	4014	3868	3722	3569	3424	3287	3159	3031	2916	2805	2696
3	4666	4499	4340	4186	4038	3893	3743	3590	3445	3305	3172	3050	2934	2824	2713
4	4698	4528	4365	4210	4063	3918	3764	3611	3475	3334	3195	3064	2948	2838	2727
5	4731	4562	4395	4236	4089	3939	3795	3642	3498	3356	3215	3078	2962	2852	2746

6	4765	4596	4427	4262	4114	3970	3818	3665	3521	3380	3239	3100	2981	2870	2760
7	4799	4631	4462	4295	4139	3986	3832	3679	3533	3391	3252	3113	2994	2883	2773
8	4821	4651	4480	4310	4151	3996	3843	3689	3546	3404	3262	3127	3007	2901	2782
9	4844	4665	4495	4329	4165	4007	3854	3703	3557	3415	3277	3146	3025	2915	2784
10	4868	4680	4510	4345	4180	4021	3865	3715	3568	3427	3296	3161	3039	2919	2786
11	4897	4707	4526	4361	4196	4077	3923	3766	3616	3480	3345	3210	3081	2954	2823
12	4975	4784	4603	4421	4253	4099	3940	3782	3631	3496	3361	3227	3091	2959	2827
13	5005	4814	4634	4447	4271	4116	3958	3799	3650	3505	3369	3233	3097	2964	2831
14	5035	4845	4666	4475	4289	4137	3979	3826	3668	3512	3376	3240	3104	2970	2836
15	5067	4877	4691	4499	4313	4159	4001	3849	3691	3539	3384	3248	3111	2977	2843
16	5088	4949	4762	4570	4383	4218	4069	3913	3755	3603	3445	3297	3153	3019	2885
17	5159	4968	4784	4593	4406	4239	4091	3937	3785	3627	3475	3318	3170	3027	2894
18	5178	4987	4804	4616	4430	4260	4112	3959	3810	3653	3501	3343	3174	3025	2881
19	5198	5006	4825	4641	4454	4326	4174	4026	3873	3710	3546	3375	3211	3045	2908
20	5270	5072	4892	4711	4526	4349	4197	4034	3875	3709	3543	3372	3208	3040	2903
21	5292	5093	4912	4732	4548	4361	4199	4034	3868	3709	3536	3370	3199	3035	2890
22	5324	5114	4934	4746	4606	4414	4237	4073	3908	3749	3578	3405	3239	3066	2921
23	5417	5198	4993	4802	4615	4424	4245	4079	3909	3743	3580	3407	3240	3067	2921
24	5442	5214	5005	4812	4625	4434	4254	4082	3957	3787	3623	3450	3281	3117	2958
25	5460	5232	5068	4874	4681	4493	4305	4134	3966	3795	3621	3460	3293	3126	2965
26	5536	5309	5084	4890	4696	4505	4315	4144	3971	3803	3629	3506	3347	3179	3011
27	5556	5329	5100	4907	4761	4570	4376	4195	4022	3853	3679	3513	3351	3192	3025
28	5633	5408	5178	4973	4779	4577	4378	4195	4031	3857	3689	3559	3397	3235	3077
29	5650	5425	5201	4991	4836	4627	4428	4228	4066	3902	3736	3568	3406	3244	3075
30	5722	5498	5275	5045	4838	4629	4420	4224	4062	3901	3775	3608	3454	3283	3110
31	5739	5516	5282	5046	4887	4680	4472	4274	4095	3934	3772	3598	3429	3280	3108
32	5757	5579	5343	5106	4888	4682	4475	4267	4129	3967	3791	3613	3438	3284	3123
33	5821	5585	5349	5168	4938	4732	4526	4319	4111	3948	3770	3591	3413	3259	3134
34	5874	5643	5412	5176	4942	4736	4577	4364	4148	3953	3771	3608	3428	3264	3109
35	5872	5644	5414	5236	5004	4788	4575	4359	4143	3943	3797	3612	3429	3270	3115
36	5937	5696	5467	5239	5008	4832	4619	4403	4187	3973	3788	3603	3417	3279	3133
37	5945	5697	5520	5292	5059	4825	4613	4445	4232	4015	3819	3634	3459	3287	3135
38	6032	5750	5523	5342	5108	4872	4652	4440	4227	4059	3851	3678	3507	3336	3168
39	6042	5835	5574	5340	5106	4923	4691	4480	4267	4054	3833	3708	3556	3385	3213
40	6102	5838	5637	5386	5157	4922	4739	4520	4308	4088	3866	3687	3519	3398	3240
41	6161	5894	5629	5426	5199	4969	4740	4517	4343	4121	3899	3662	3516	3370	3223
42	6160	5951	5683	5440	5237	5009	4781	4549	4332	4156	3911	3689	3514	3367	3223
43	6217	5950	5741	5479	5229	5049	4817	4583	4359	4116	3941	3721	3513	3368	3224
44	6298	6009	5742	5533	5293	5039	4853	4619	4386	4143	3926	3750	3538	3372	3226

45	6282	6047	5789	5582	5334	5076	4843	4656	4421	4172	3954	3785	3576	3377	3231
46	6310	6107	5821	5567	5362	5096	4870	4685	4460	4202	3990	3781	3615	3405	3217
47	6338	6086	5882	5596	5341	5141	4885	4662	4478	4223	4015	3822	3655	3425	3224
48	6384	6116	5912	5625	5370	5164	4898	4675	4491	4241	4024	3830	3668	3443	3243
49	6408	6146	5893	5689	5401	5195	4912	4689	4509	4259	4040	3834	3673	3447	3263
50	6453	6217	5916	5712	5425	5179	4972	4707	4529	4310	4060	3840	3679	3463	3284
51	6488	6253	5930	5683	5479	5193	4988	4716	4502	4324	4075	3861	3651	3484	3306
52	6562	6233	5998	5695	5491	5205	5007	4733	4544	4331	4082	3868	3657	3476	3309
53	6599	6270	6036	5708	5504	5257	5028	4789	4558	4338	4089	3911	3666	3457	3292
54	6636	6348	6075	5784	5519	5280	5050	4812	4581	4346	4098	3922	3709	3463	3296
55	6659	6369	6135	5806	5530	5286	5050	4819	4582	4350	4101	3925	3720	3502	3295
56	6658	6373	6138	5808	5583	5275	5081	4808	4613	4340	4160	3918	3711	3495	3292
57	6658	6423	6137	5859	5592	5282	5067	4795	4599	4327	4145	3909	3732	3487	3308
58	6729	6424	6138	5869	5604	5339	5072	4860	4588	4348	4132	3896	3725	3498	3358
59	6754	6442	6192	5882	5661	5352	5076	4854	4578	4383	4121	3951	3715	3518	3358
60	6831	6504	6196	5929	5657	5382	5123	4857	4570	4375	4137	3941	3720	3525	3327
61	6825	6498	6254	5922	5648	5426	5114	4861	4656	4369	4129	3930	3697	3497	3311
62	6815	6551	6261	5928	5693	5419	5153	4911	4661	4373	4169	3939	3675	3488	3285
63	6870	6558	6270	5989	5701	5415	5204	4917	4653	4445	4153	3919	3730	3465	3278
64	6863	6620	6332	6021	5683	5440	5184	4920	4683	4419	4149	3929	3712	3475	3293
65	6921	6603	6295	6047	5728	5384	5123	4947	4683	4390	4174	3903	3675	3459	3289
66	6697	6628	6308	5988	5668	5419	5107	4887	4657	4446	4170	3867	3652	3486	3273
67	6516	6384	6251	6002	5682	5361	5044	4823	4650	4417	4141	3865	3661	3448	3271
68	6231	6149	6069	5947	5626	5304	5055	4809	4583	4318	4172	3896	3641	3441	3289
69	6045	5843	5757	5745	5643	5322	4999	4741	4568	4291	4066	3858	3622	3460	3290
70	5861	5610	5518	5333	5246	5162	5043	4732	4486	4200	3963	3812	3604	3455	3281
71	5579	5257	5182	5089	4997	4907	4820	4670	4398	4188	3913	3705	3485	3302	3296
72	5397	5071	4872	4773	4676	4653	4554	4434	4381	4102	3819	3604	3436	3194	3118
73	4810	4886	4629	4529	4424	4176	4035	3933	3888	3916	3813	3557	3318	3076	2936
74	4158	4279	4331	4182	4016	3866	3719	3620	3569	3520	3371	3333	3267	3024	2787
75	3506	3613	3848	3734	3621	3464	3315	3190	3135	3097	3063	3024	2970	2912	2657
76	2852	3080	3110	3359	3251	2998	2888	2828	2782	2638	2602	2611	2550	2492	2438
77	2306	2554	2585	2855	2706	2600	2526	2437	2390	2345	2303	2132	2065	2000	2055
78	1827	1845	2086	2110	2223	2109	1969	2099	2104	1948	1899	1824	1645	1666	1765
79	1347	1355	1585	1599	1827	1556	1587	1642	1655	1598	1428	1345	1340	1362	1473
80	838	864	864	1086	1092	1160	1050	1252	1369	1200	1127	973	1039	1144	1113
81	713	668	581	546	541	559	666	705	901	803	722	735	755	855	803
82	614	525	479	390	345	304	269	302	335	454	351	449	469	565	494
83	516	425	376	285	242	257	251	216	189	154	149	163	178	269	189

84	419	325	231	187	196	214	231	198	163	135	117	102	93	82	76
85	245	226	132	132	156	183	187	174	145	110	92	76	67	66	68
86	92	94	88	105	127	139	154	156	120	85	67	58	51	52	54
87	30	31	42	77	99	107	109	112	97	67	49	38	37	38	40
88	20	20	22	36	58	63	77	79	79	42	24	23	24	24	25
89	10	10	10	12	29	32	32	33	34	19	10	10	10	10	11
90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 17d.
Relative Spatial Response of ULIS (times 10,000)

AZ	ZA = 46	ZA = 47	ZA = 48	ZA = 49	ZA = 50	ZA = 51	ZA = 52	ZA = 53	ZA = 54	ZA = 55	ZA = 56	ZA = 57	ZA = 58	ZA = 59	ZA = 60
-90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-89	19	19	19	18	13	7	8	8	8	12	23	26	20	13	12
-88	39	39	37	32	23	16	17	17	20	30	37	30	22	21	24
-87	59	58	49	41	37	28	24	25	34	37	36	31	30	33	38
-86	78	70	57	51	45	39	34	35	38	37	36	38	41	47	50
-85	90	78	68	59	54	55	53	41	42	43	43	47	53	58	64
-84	105	102	119	120	145	145	134	98	74	50	51	55	61	67	85
-83	191	189	209	211	239	238	202	179	156	121	105	113	160	185	197
-82	373	282	301	324	317	294	274	248	247	247	248	253	301	317	372
-81	570	532	448	413	409	384	383	384	385	387	399	403	444	505	507
-80	767	733	648	576	579	576	576	544	547	551	557	570	637	610	584
-79	994	963	871	786	746	731	734	739	745	753	781	797	765	749	719
-78	1191	1159	1077	958	913	922	911	915	924	970	982	932	884	893	865
-77	1418	1364	1285	1207	1139	1129	1121	1115	1121	1141	1104	1080	1036	1017	992
-76	1613	1531	1454	1379	1306	1321	1316	1312	1288	1259	1226	1209	1188	1140	1108
-75	1704	1682	1640	1595	1520	1490	1464	1407	1361	1344	1311	1291	1259	1200	1156
-74	1784	1752	1731	1691	1666	1589	1510	1438	1424	1422	1402	1337	1273	1236	1196
-73	1883	1864	1824	1760	1677	1613	1558	1511	1498	1471	1427	1369	1305	1258	1223
-72	1968	1939	1876	1790	1716	1652	1585	1578	1543	1489	1425	1387	1335	1276	1228
-71	2019	1960	1886	1801	1755	1692	1626	1586	1552	1499	1441	1395	1335	1279	1231
-70	2024	1980	1917	1838	1774	1711	1643	1596	1560	1502	1447	1389	1338	1278	1230
-69	2046	1986	1942	1872	1785	1706	1662	1607	1555	1508	1454	1393	1342	1282	1234
-68	2066	2008	1938	1882	1796	1726	1681	1623	1561	1515	1456	1397	1347	1287	1239
-67	2087	2017	1948	1876	1813	1745	1697	1634	1569	1523	1461	1398	1347	1288	1244
-66	2082	2021	1953	1881	1828	1760	1694	1647	1581	1530	1467	1404	1353	1294	1256
-65	2086	2017	1958	1892	1834	1765	1704	1649	1583	1532	1472	1423	1360	1315	1258

-64	2097	2022	1970	1898	1827	1776	1706	1650	1581	1532	1474	1426	1366	1318	1260
-63	2104	2034	1976	1904	1839	1783	1714	1657	1590	1542	1482	1431	1370	1316	1259
-62	2118	2040	1968	1916	1846	1791	1718	1662	1597	1549	1482	1428	1378	1314	1267
-61	2122	2052	1981	1923	1854	1802	1724	1664	1605	1550	1493	1427	1377	1319	1266
-60	2117	2057	1988	1937	1864	1799	1722	1672	1618	1547	1492	1426	1376	1328	1272
-59	2119	2070	2000	1939	1862	1806	1745	1683	1624	1554	1499	1444	1382	1329	1283
-58	2132	2076	2009	1942	1869	1805	1751	1681	1622	1555	1500	1445	1392	1335	1284
-57	2145	2087	2003	1933	1881	1815	1757	1687	1629	1574	1508	1453	1393	1347	1292
-56	2152	2092	2008	1937	1869	1814	1756	1698	1630	1576	1521	1456	1402	1352	1297
-55	2158	2088	2028	1944	1876	1808	1764	1706	1639	1585	1530	1468	1394	1347	1299
-54	2167	2096	2026	1943	1874	1826	1764	1714	1657	1577	1515	1460	1405	1358	1304
-53	2178	2106	2035	1951	1883	1827	1766	1707	1643	1582	1526	1461	1407	1353	1307
-52	2180	2117	2042	1975	1892	1835	1783	1707	1641	1583	1528	1473	1411	1364	1305
-51	2192	2104	2048	1983	1902	1844	1783	1718	1654	1585	1522	1467	1414	1366	1312
-50	2193	2111	2045	1990	1924	1850	1785	1721	1657	1587	1533	1480	1417	1366	1301
-49	2195	2118	2053	1986	1919	1852	1790	1715	1651	1589	1535	1482	1428	1361	1306
-48	2201	2135	2056	1990	1920	1852	1792	1730	1666	1603	1538	1485	1429	1362	1304
-47	2205	2139	2072	1994	1921	1854	1793	1733	1671	1608	1550	1496	1429	1372	1313
-46	2209	2143	2077	2007	1935	1865	1795	1735	1674	1614	1553	1498	1430	1371	1312
-45	2214	2148	2082	2010	1937	1867	1807	1747	1687	1627	1564	1505	1436	1377	1321
-44	2231	2154	2080	2009	1940	1869	1810	1750	1687	1623	1560	1502	1435	1377	1327
-43	2237	2170	2091	2017	1950	1872	1809	1747	1691	1628	1564	1505	1449	1380	1321
-42	2243	2170	2091	2017	1949	1880	1814	1752	1689	1625	1562	1502	1446	1381	1322
-41	2249	2184	2105	2028	1961	1890	1811	1749	1686	1623	1568	1506	1449	1387	1316
-40	2260	2185	2106	2029	1970	1898	1829	1766	1692	1629	1566	1504	1444	1389	1329
-39	2265	2189	2116	2042	1969	1897	1827	1765	1702	1639	1573	1508	1447	1385	1324
-38	2261	2184	2111	2038	1968	1896	1825	1771	1709	1646	1581	1504	1449	1388	1327
-37	2257	2180	2107	2034	1972	1904	1835	1770	1705	1640	1581	1518	1457	1384	1330
-36	2270	2200	2126	2054	1982	1914	1845	1771	1706	1641	1576	1515	1460	1399	1339
-35	2277	2197	2123	2051	1979	1919	1850	1778	1713	1649	1579	1518	1456	1402	1344
-34	2274	2195	2120	2057	1985	1916	1845	1772	1715	1650	1585	1532	1472	1400	1346
-33	2288	2218	2139	2069	1997	1914	1849	1776	1710	1652	1586	1525	1467	1412	1349
-32	2296	2216	2132	2064	2002	1933	1860	1787	1724	1660	1580	1524	1465	1403	1343
-31	2295	2212	2126	2065	1997	1925	1862	1792	1720	1661	1595	1530	1477	1413	1338
-30	2310	2236	2150	2073	2005	1939	1867	1799	1722	1657	1597	1531	1470	1409	1343
-29	2319	2233	2147	2075	2007	1931	1864	1796	1728	1666	1603	1545	1481	1401	1339
-28	2330	2248	2172	2089	2015	1947	1872	1788	1725	1657	1599	1536	1474	1409	1349
-27	2323	2249	2167	2086	2015	1940	1871	1800	1732	1669	1604	1546	1478	1400	1337
-26	2341	2260	2178	2101	2021	1954	1865	1798	1730	1662	1600	1537	1472	1402	1343

-25	2335	2253	2175	2090	2016	1944	1877	1805	1742	1675	1608	1547	1477	1412	1335
-24	2346	2267	2183	2105	2022	1955	1883	1815	1731	1670	1604	1540	1472	1406	1338
-23	2341	2257	2179	2094	2017	1945	1878	1804	1740	1674	1613	1544	1479	1411	1346
-22	2350	2272	2188	2110	2025	1957	1885	1816	1744	1683	1618	1552	1468	1403	1339
-21	2347	2263	2185	2100	2022	1948	1881	1806	1739	1674	1612	1545	1476	1412	1343
-20	2356	2279	2195	2116	2031	1960	1888	1818	1744	1683	1621	1550	1484	1416	1352
-19	2372	2288	2204	2126	2047	1968	1901	1826	1756	1693	1626	1543	1474	1410	1345
-18	2377	2280	2202	2124	2039	1965	1892	1822	1752	1684	1620	1549	1483	1419	1350
-17	2396	2303	2213	2135	2056	1973	1905	1830	1760	1695	1626	1559	1493	1424	1360
-16	2421	2317	2227	2146	2068	1991	1913	1844	1774	1701	1636	1570	1499	1434	1353
-15	2410	2307	2213	2136	2059	1978	1907	1838	1766	1697	1631	1560	1494	1428	1363
-14	2419	2317	2222	2141	2064	1987	1913	1841	1773	1704	1634	1568	1503	1437	1370
-13	2435	2333	2231	2150	2074	1993	1916	1847	1779	1707	1638	1572	1507	1438	1372
-12	2446	2344	2246	2156	2080	2003	1925	1851	1782	1713	1643	1574	1509	1442	1375
-11	2463	2355	2258	2167	2090	2009	1931	1858	1789	1720	1628	1563	1497	1430	1360
-10	2449	2349	2252	2154	2078	2000	1922	1848	1777	1707	1635	1567	1502	1433	1364
-9	2467	2361	2264	2169	2089	2011	1929	1852	1784	1714	1643	1570	1505	1438	1369
-8	2479	2380	2284	2181	2096	2019	1941	1863	1792	1719	1648	1577	1511	1443	1374
-7	2492	2393	2297	2200	2108	2031	1949	1871	1797	1727	1656	1584	1516	1449	1378
-6	2512	2413	2317	2214	2120	2039	1961	1883	1807	1735	1664	1590	1520	1453	1384
-5	2520	2420	2324	2228	2132	2048	1970	1893	1814	1741	1670	1599	1528	1459	1390
-4	2532	2428	2331	2233	2137	2050	1973	1895	1818	1745	1673	1602	1532	1463	1394
-3	2540	2435	2335	2240	2144	2056	1976	1899	1822	1748	1677	1605	1534	1465	1397
-2	2552	2446	2343	2245	2149	2061	1979	1902	1825	1751	1680	1608	1538	1469	1400
-1	2560	2455	2350	2253	2157	2069	1985	1906	1829	1756	1684	1613	1542	1473	1405
0	2544	2437	2330	2235	2139	2053	1968	1891	1813	1742	1670	1599	1527	1460	1392
1	2583	2478	2371	2267	2172	2084	1998	1915	1838	1765	1693	1622	1548	1476	1408
2	2593	2488	2381	2279	2181	2093	2007	1923	1843	1770	1699	1626	1551	1479	1408
3	2608	2502	2396	2289	2188	2100	2015	1929	1848	1775	1703	1629	1554	1482	1410
4	2619	2514	2407	2304	2200	2110	2025	1939	1855	1781	1706	1631	1557	1484	1413
5	2637	2529	2422	2316	2210	2118	2032	1947	1861	1783	1708	1633	1559	1486	1414
6	2648	2534	2427	2319	2212	2119	2033	1948	1862	1783	1708	1633	1558	1485	1413
7	2648	2535	2428	2321	2214	2120	2034	1949	1863	1783	1708	1633	1558	1485	1413
8	2650	2536	2431	2323	2216	2122	2036	1950	1864	1784	1708	1633	1558	1485	1413
9	2652	2537	2434	2327	2219	2124	2038	1952	1866	1786	1709	1633	1559	1485	1413
10	2655	2539	2436	2330	2223	2127	2040	1954	1868	1787	1711	1635	1560	1486	1414
11	2691	2565	2463	2360	2253	2151	2064	1978	1892	1809	1713	1636	1561	1487	1414
12	2694	2568	2466	2363	2258	2154	2068	1981	1895	1811	1734	1657	1581	1506	1434
13	2699	2571	2468	2366	2263	2158	2071	1985	1898	1813	1737	1660	1583	1507	1435

14	2704	2574	2472	2368	2266	2162	2075	1989	1902	1817	1739	1663	1586	1510	1434
15	2710	2578	2475	2372	2270	2166	2080	1993	1903	1816	1738	1658	1580	1503	1430
16	2751	2617	2505	2399	2296	2193	2098	2011	1923	1833	1752	1674	1593	1515	1423
17	2751	2614	2503	2399	2296	2189	2097	2007	1919	1832	1747	1668	1590	1509	1434
18	2744	2611	2502	2400	2293	2190	2093	2007	1919	1828	1745	1663	1585	1507	1428
19	2764	2642	2522	2422	2319	2213	2113	2024	1937	1849	1761	1661	1579	1501	1425
20	2765	2644	2521	2422	2318	2214	2110	2024	1934	1847	1760	1677	1597	1515	1438
21	2767	2642	2521	2419	2320	2213	2109	2020	1934	1844	1757	1677	1594	1514	1433
22	2797	2675	2550	2444	2341	2240	2133	2042	1953	1866	1776	1693	1591	1510	1431
23	2800	2675	2553	2441	2342	2238	2136	2039	1953	1864	1777	1691	1610	1527	1447
24	2831	2709	2584	2466	2363	2264	2160	2062	1951	1865	1775	1691	1608	1527	1443
25	2838	2711	2588	2465	2365	2262	2162	2060	1974	1882	1790	1705	1623	1543	1442
26	2876	2749	2621	2498	2388	2289	2160	2060	1968	1876	1788	1697	1620	1538	1459
27	2881	2757	2630	2501	2390	2286	2186	2081	1984	1896	1804	1716	1631	1536	1454
28	2921	2793	2668	2538	2414	2313	2207	2078	1984	1892	1803	1711	1629	1547	1470
29	2917	2800	2671	2546	2418	2313	2211	2105	2001	1913	1820	1731	1639	1538	1459
30	2937	2817	2700	2581	2451	2342	2236	2129	2002	1908	1818	1723	1629	1551	1467
31	2935	2794	2681	2577	2460	2343	2241	2128	2014	1923	1832	1737	1647	1560	1464
32	2971	2806	2693	2579	2477	2361	2253	2140	2034	1926	1818	1736	1640	1551	1474
33	2979	2835	2706	2591	2476	2337	2243	2136	2022	1917	1828	1738	1648	1566	1484
34	2954	2811	2685	2579	2463	2348	2238	2133	2037	1928	1830	1748	1660	1553	1482
35	2976	2840	2705	2585	2466	2360	2245	2139	2033	1932	1824	1736	1647	1565	1483
36	2996	2869	2731	2606	2486	2365	2246	2126	2028	1930	1833	1743	1660	1571	1484
37	2997	2859	2722	2593	2482	2361	2232	2133	2042	1944	1852	1759	1669	1559	1477
38	3030	2892	2753	2616	2489	2359	2234	2137	2049	1958	1866	1750	1666	1575	1477
39	3064	2925	2787	2638	2501	2371	2247	2136	2041	1952	1857	1767	1669	1570	1477
40	3089	2945	2796	2646	2514	2383	2261	2150	2028	1939	1850	1760	1665	1576	1485
41	3076	2960	2819	2669	2518	2382	2243	2132	2021	1932	1853	1763	1671	1572	1469
42	3078	2938	2800	2662	2512	2370	2259	2147	2035	1936	1846	1756	1665	1561	1479
43	3079	2935	2798	2661	2523	2373	2264	2152	2051	1941	1851	1761	1670	1563	1480
44	3081	2915	2774	2637	2505	2382	2274	2166	2057	1944	1846	1754	1646	1560	1490
45	3064	2918	2773	2642	2513	2391	2283	2175	2067	1957	1852	1760	1650	1564	1484
46	3070	2924	2773	2651	2522	2401	2280	2171	2063	1956	1850	1754	1644	1560	1478
47	3077	2927	2776	2645	2516	2399	2290	2182	2076	1970	1864	1760	1650	1566	1483
48	3082	2930	2764	2650	2527	2410	2302	2196	2090	1984	1866	1760	1662	1563	1475
49	3087	2912	2769	2654	2539	2423	2317	2200	2095	1988	1882	1774	1670	1564	1471
50	3105	2917	2775	2680	2564	2426	2319	2212	2105	1982	1875	1767	1657	1563	1453
51	3126	2924	2800	2685	2536	2418	2309	2201	2094	1966	1849	1753	1657	1561	1467
52	3109	2964	2806	2681	2530	2412	2299	2171	2063	1963	1867	1771	1659	1562	1452

53	3116	2953	2806	2654	2525	2406	2273	2162	2063	1967	1870	1756	1659	1549	1452
54	3099	2948	2804	2651	2522	2420	2286	2170	2071	1941	1843	1746	1648	1550	1443
55	3094	2949	2827	2671	2539	2397	2281	2163	2039	1941	1843	1745	1614	1516	1428
56	3096	2973	2803	2671	2539	2393	2275	2157	2027	1929	1831	1713	1614	1515	1419
57	3143	2976	2806	2673	2561	2396	2288	2148	2031	1931	1813	1714	1602	1502	1406
58	3163	2993	2833	2697	2528	2384	2285	2145	2026	1902	1803	1703	1604	1490	1398
59	3164	3025	2830	2694	2523	2399	2266	2160	2041	1907	1806	1707	1587	1483	1402
60	3150	2995	2811	2697	2540	2395	2223	2140	2039	1900	1798	1679	1578	1489	1392
61	3152	2974	2805	2674	2525	2412	2241	2121	2019	1915	1806	1684	1584	1480	1388
62	3137	2951	2785	2666	2517	2396	2240	2115	2001	1920	1795	1691	1590	1476	1395
63	3111	2951	2813	2646	2509	2388	2238	2115	1983	1902	1803	1702	1579	1485	1388
64	3119	2942	2814	2644	2490	2381	2231	2109	1966	1887	1785	1691	1573	1494	1395
65	3111	2953	2806	2647	2513	2368	2242	2124	1984	1892	1779	1685	1569	1489	1391
66	3111	2968	2804	2626	2512	2369	2230	2129	1989	1888	1773	1658	1565	1467	1391
67	3120	2956	2791	2621	2513	2364	2247	2119	1983	1879	1769	1655	1563	1467	1393
68	3119	2948	2766	2651	2502	2366	2244	2110	1981	1877	1762	1660	1569	1479	1405
69	3116	2928	2791	2638	2487	2344	2226	2094	1980	1876	1764	1653	1563	1479	1409
70	3093	2956	2788	2628	2457	2347	2196	2077	1986	1876	1758	1645	1553	1464	1398
71	3121	2947	2786	2612	2486	2326	2176	2061	1966	1862	1751	1660	1544	1456	1387
72	3043	2931	2803	2627	2454	2279	2154	2070	1947	1839	1728	1647	1534	1444	1374
73	2898	2812	2715	2573	2397	2239	2152	2042	1933	1816	1733	1614	1494	1429	1368
74	2714	2617	2550	2452	2386	2239	2106	1988	1860	1770	1698	1580	1459	1403	1335
75	2558	2498	2396	2251	2114	2058	1990	1896	1772	1659	1578	1513	1455	1357	1279
76	2366	2217	2064	1912	1790	1787	1744	1703	1628	1550	1458	1405	1339	1275	1212
77	2083	1951	1793	1636	1523	1472	1424	1392	1389	1404	1315	1243	1150	1121	1076
78	1713	1616	1453	1233	1153	1142	1103	1100	1106	1164	1125	1042	965	969	922
79	1397	1318	1125	959	886	853	845	844	845	849	879	850	772	757	713
80	1027	943	787	643	636	625	618	563	560	559	560	552	593	560	523
81	712	622	460	427	409	372	365	360	355	351	362	361	408	463	456
82	397	300	298	329	311	281	254	223	216	210	205	219	275	281	324
83	170	172	198	206	240	227	185	155	125	84	61	78	127	154	154
84	76	77	101	108	139	148	117	74	43	27	26	29	35	38	56
85	64	55	47	44	41	45	51	38	33	32	31	35	39	40	40
86	61	52	43	40	38	32	31	35	35	35	35	34	33	33	32
87	46	49	40	37	32	23	24	29	35	35	35	27	26	24	24
88	32	35	37	28	20	15	20	24	28	33	35	26	18	17	15
89	17	19	19	19	10	9	13	18	19	21	21	26	17	9	8
90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 17e.
Relative Spatial Response of ULIS (times 10,000)

AZ	ZA = 61	ZA = 62	ZA = 63	ZA = 64	ZA = 65	ZA = 66	ZA = 67	ZA = 68	ZA = 69	ZA= 70	ZA = 71	ZA= 72	ZA= 73	ZA= 74	ZA= 75
-90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-89	7	6	7	8	8	11	20	32	24	9	5	6	8	13	18
-88	20	14	14	15	16	20	25	32	26	14	14	19	23	28	33
-87	33	26	22	23	25	30	35	39	36	28	20	24	29	33	27
-86	48	40	33	31	34	38	43	48	47	41	35	29	34	32	34
-85	61	55	49	44	42	47	51	56	59	53	49	44	40	40	42
-84	97	84	78	75	72	70	69	68	65	67	59	56	53	62	46
-83	206	216	214	225	198	174	178	182	189	183	169	173	119	106	99
-82	370	374	348	322	308	287	291	298	282	277	224	187	171	159	181
-81	480	454	441	417	405	398	402	398	347	268	242	238	254	283	253
-80	572	557	536	524	504	496	473	405	329	307	308	342	371	344	285
-79	691	684	678	674	645	559	450	373	371	394	410	437	435	377	341
-78	858	834	811	769	719	570	434	446	468	493	520	526	470	419	387
-77	996	945	902	837	706	661	611	563	563	590	602	564	513	481	458
-76	1066	1035	975	896	859	859	811	750	733	690	642	605	557	522	474
-75	1110	1053	1012	959	920	888	842	792	752	704	668	621	579	523	484
-74	1142	1087	1049	995	945	905	854	801	765	718	678	625	579	526	489
-73	1167	1111	1062	1004	953	914	861	827	777	734	682	639	584	539	503
-72	1169	1109	1061	1012	961	923	871	833	781	739	687	642	599	544	502
-71	1171	1112	1068	1020	981	921	882	832	790	739	697	642	599	548	507
-70	1171	1116	1079	1027	978	918	880	830	789	738	696	654	602	546	509
-69	1176	1128	1087	1027	975	921	879	838	788	746	704	649	597	555	516
-68	1185	1146	1087	1033	978	929	883	842	800	751	705	653	606	555	519
-67	1196	1147	1088	1037	981	933	892	842	802	755	709	654	608	566	523
-66	1197	1149	1096	1041	991	937	896	856	802	756	710	664	614	575	528
-65	1210	1151	1100	1045	996	948	902	857	812	766	721	667	616	574	526
-64	1213	1149	1105	1061	1002	953	912	866	813	767	721	674	616	576	531
-63	1211	1164	1102	1058	1008	958	910	864	819	773	725	672	616	577	537
-62	1210	1163	1111	1055	1005	956	915	870	818	769	718	663	616	573	534
-61	1220	1164	1111	1065	1012	960	914	868	820	771	715	663	617	579	536
-60	1220	1174	1118	1066	1020	968	918	871	829	775	720	670	619	581	543
-59	1227	1176	1130	1077	1028	961	914	873	821	766	712	666	621	588	544
-58	1239	1193	1129	1080	1018	970	923	873	819	765	720	674	623	586	550
-57	1245	1189	1140	1079	1024	967	919	872	818	765	722	677	633	593	551
-56	1248	1192	1132	1077	1017	977	925	871	818	772	725	680	641	600	553
-55	1251	1193	1139	1075	1025	974	931	878	825	773	729	690	645	601	555

-54	1246	1192	1128	1076	1018	974	924	878	826	782	739	689	639	598	556
-53	1252	1189	1135	1086	1028	973	930	878	834	786	736	690	641	592	558
-52	1242	1188	1138	1081	1031	974	935	883	831	787	737	688	643	594	556
-51	1248	1192	1133	1084	1035	978	925	880	826	788	739	689	641	597	557
-50	1245	1190	1130	1082	1031	980	927	883	828	786	741	690	642	605	558
-49	1250	1196	1134	1086	1028	978	925	886	830	788	739	692	643	602	557
-48	1249	1185	1139	1090	1031	981	929	883	832	791	741	694	651	603	557
-47	1256	1192	1138	1089	1029	985	933	885	830	794	743	692	654	604	558
-46	1265	1201	1146	1093	1034	984	935	888	833	792	746	703	653	603	563
-45	1266	1199	1140	1094	1037	989	933	891	836	795	747	702	648	607	560
-44	1269	1199	1140	1089	1033	990	943	889	848	796	751	700	655	605	557
-43	1263	1205	1141	1090	1043	983	941	889	844	793	749	699	654	604	562
-42	1264	1205	1136	1092	1045	982	936	896	840	798	746	702	652	608	559
-41	1259	1206	1148	1088	1045	991	936	896	837	792	752	697	656	604	564
-40	1260	1202	1150	1090	1040	991	935	891	844	790	749	693	652	610	560
-39	1262	1204	1147	1102	1040	986	944	889	842	796	744	699	646	606	566
-38	1269	1218	1149	1099	1050	987	940	896	836	794	750	696	651	603	563
-37	1272	1214	1163	1099	1046	998	940	894	844	800	747	703	648	609	567
-36	1277	1219	1161	1108	1047	999	949	899	843	796	753	700	654	615	564
-35	1287	1217	1154	1099	1053	1003	945	898	852	794	751	704	651	612	570
-34	1283	1220	1162	1095	1048	998	950	892	847	800	756	702	659	616	562
-33	1277	1215	1154	1100	1051	994	941	896	849	793	750	705	663	607	564
-32	1281	1223	1150	1096	1047	1000	947	890	844	798	751	699	656	609	567
-31	1276	1214	1159	1101	1054	992	942	893	849	803	745	703	658	602	559
-30	1284	1223	1156	1097	1050	998	948	898	844	794	748	707	651	605	562
-29	1275	1220	1161	1107	1054	994	940	893	849	800	743	701	655	609	565
-28	1285	1229	1158	1104	1050	1001	948	899	843	794	748	703	659	602	558
-27	1278	1221	1167	1110	1058	1005	944	895	846	800	754	707	652	607	560
-26	1281	1227	1174	1104	1049	999	950	901	852	806	749	702	657	611	564
-25	1275	1222	1164	1109	1052	1002	953	902	843	798	751	706	660	615	558
-24	1282	1225	1169	1114	1057	993	945	894	845	800	753	707	661	605	560
-23	1287	1230	1162	1104	1049	997	947	898	849	801	756	698	652	606	562
-22	1276	1222	1167	1110	1055	999	951	902	841	792	747	701	654	608	564
-21	1280	1227	1171	1116	1061	991	943	894	843	795	750	704	655	610	566
-20	1287	1229	1162	1109	1052	998	947	899	847	799	753	707	658	601	557
-19	1276	1220	1167	1112	1058	1004	952	901	852	803	756	697	650	603	559
-18	1285	1225	1172	1117	1064	1011	956	906	845	796	748	700	653	607	562
-17	1294	1231	1175	1122	1056	1003	947	898	850	801	750	704	657	610	564
-16	1288	1220	1167	1114	1062	1005	951	903	854	803	753	706	659	613	565

-15	1295	1230	1172	1120	1064	1009	956	907	857	805	755	709	662	614	565
-14	1305	1240	1178	1122	1068	1013	960	910	858	807	758	711	651	603	554
-13	1308	1244	1180	1125	1071	1017	963	911	861	797	748	700	652	604	555
-12	1311	1245	1182	1127	1059	1005	950	900	849	798	748	701	653	604	556
-11	1296	1232	1171	1115	1061	1006	952	901	850	800	750	702	654	606	558
-10	1299	1235	1175	1118	1062	1008	955	902	851	801	750	701	655	607	559
-9	1302	1238	1177	1120	1064	1010	957	904	852	802	751	702	655	609	561
-8	1307	1240	1181	1123	1067	1013	960	906	854	803	753	703	655	609	563
-7	1310	1244	1185	1128	1071	1016	962	909	855	805	754	705	655	609	563
-6	1316	1248	1189	1132	1075	1019	964	911	858	806	756	706	657	609	563
-5	1322	1254	1194	1136	1078	1021	967	914	861	809	758	708	659	610	564
-4	1326	1256	1197	1139	1082	1025	970	917	864	811	760	710	660	610	563
-3	1328	1261	1201	1144	1087	1026	971	918	865	810	759	710	660	610	563
-2	1333	1266	1206	1149	1088	1028	973	920	865	810	759	710	660	610	562
-1	1338	1271	1211	1151	1090	1030	975	920	865	810	759	710	660	610	563
0	1325	1258	1197	1137	1077	1016	961	906	851	796	747	697	648	598	551
1	1340	1273	1212	1152	1092	1032	975	920	865	810	760	710	660	611	563
2	1339	1272	1211	1152	1092	1032	976	921	866	811	760	710	661	611	564
3	1339	1271	1210	1151	1092	1032	976	921	866	811	760	711	661	612	564
4	1341	1271	1209	1150	1091	1032	977	922	867	812	761	712	662	612	565
5	1342	1271	1208	1149	1090	1031	976	921	866	811	760	710	660	611	563
6	1342	1270	1207	1148	1089	1031	974	919	864	809	758	709	659	609	562
7	1341	1269	1206	1147	1088	1029	973	919	863	808	757	707	657	607	560
8	1341	1269	1205	1146	1087	1028	972	918	863	807	756	706	656	605	558
9	1341	1269	1204	1145	1086	1027	971	917	862	807	755	705	654	604	556
10	1341	1269	1205	1145	1086	1027	970	916	861	806	754	703	653	602	555
11	1342	1270	1205	1145	1086	1026	970	915	860	806	753	703	651	601	553
12	1361	1289	1219	1160	1086	1027	969	915	860	805	753	702	651	599	552
13	1363	1290	1220	1160	1101	1041	983	927	872	804	752	701	650	599	550
14	1361	1288	1219	1158	1098	1039	980	926	870	815	762	712	649	598	549
15	1353	1280	1217	1157	1096	1036	977	923	870	814	760	710	660	610	560
16	1349	1275	1215	1155	1095	1033	974	920	867	811	757	708	658	608	559
17	1361	1289	1228	1168	1093	1033	971	917	864	810	755	706	656	606	557
18	1355	1289	1228	1166	1106	1046	980	927	860	806	752	703	653	603	554
19	1349	1288	1227	1165	1103	1039	977	922	869	815	761	700	650	600	551
20	1365	1302	1226	1164	1096	1031	973	920	865	811	757	708	659	597	548
21	1363	1302	1237	1172	1107	1025	968	915	861	807	753	704	656	607	557
22	1363	1299	1234	1165	1100	1034	978	923	858	804	749	699	653	604	554
23	1377	1308	1227	1159	1093	1033	974	918	866	812	759	695	649	600	552

24	1371	1302	1237	1171	1102	1029	972	914	862	810	755	703	656	596	549
25	1366	1300	1231	1165	1096	1039	983	924	858	805	751	699	652	605	544
26	1377	1311	1244	1159	1096	1036	979	922	866	813	748	693	646	599	549
27	1375	1306	1239	1169	1104	1045	974	916	861	809	756	700	640	593	544
28	1387	1319	1233	1166	1096	1042	981	924	857	804	751	695	646	587	541
29	1377	1311	1242	1175	1104	1035	976	918	861	810	746	693	640	593	547
30	1391	1314	1240	1168	1101	1039	986	926	855	803	754	701	635	587	543
31	1383	1303	1244	1178	1110	1031	978	921	862	811	748	697	641	583	538
32	1392	1315	1233	1174	1104	1039	982	917	857	804	752	692	639	590	545
33	1390	1308	1236	1177	1112	1031	974	921	864	798	749	696	646	586	541
34	1400	1318	1244	1167	1107	1041	982	913	860	803	754	690	640	592	537
35	1406	1316	1234	1170	1110	1045	975	916	862	794	747	694	633	588	543
36	1398	1321	1242	1178	1100	1040	976	917	851	795	751	691	638	589	535
37	1399	1322	1252	1169	1104	1044	966	911	852	800	742	696	631	581	537
38	1404	1333	1241	1167	1114	1035	969	912	840	791	741	690	636	574	532
39	1396	1323	1247	1176	1101	1040	979	902	847	793	731	691	630	579	533
40	1388	1324	1258	1166	1099	1046	970	904	849	784	736	680	639	584	526
41	1387	1325	1260	1172	1102	1044	974	913	839	786	738	679	638	578	528
42	1396	1317	1242	1184	1106	1031	972	917	842	793	730	678	629	582	521
43	1397	1314	1242	1178	1110	1029	976	905	845	785	732	673	627	577	526
44	1407	1308	1235	1171	1094	1033	974	904	850	789	735	675	627	576	521
45	1405	1310	1228	1171	1095	1032	963	909	839	785	732	678	618	576	521
46	1408	1314	1234	1167	1092	1029	967	910	839	781	727	678	621	566	519
47	1402	1310	1233	1160	1091	1034	959	907	839	785	723	664	619	565	513
48	1395	1310	1241	1163	1094	1032	957	900	846	785	719	665	617	563	511
49	1393	1327	1241	1163	1082	1028	955	900	839	785	715	661	607	561	511
50	1381	1312	1238	1163	1079	1025	961	896	832	779	721	657	605	564	511
51	1380	1308	1234	1169	1093	1013	950	894	825	779	717	656	602	552	507
52	1368	1297	1227	1154	1089	1002	956	892	825	772	711	651	601	546	503
53	1380	1297	1224	1158	1085	1011	945	881	826	766	708	653	595	541	503
54	1367	1296	1214	1142	1069	1005	934	881	817	763	708	650	590	544	498
55	1366	1293	1222	1142	1074	998	936	880	816	753	696	648	592	545	492
56	1356	1281	1206	1136	1056	989	924	868	809	753	692	636	588	537	483
57	1343	1272	1209	1131	1060	971	911	862	807	745	688	632	576	528	475
58	1334	1271	1187	1123	1045	975	915	858	802	746	689	628	565	518	474
59	1322	1250	1187	1114	1050	961	904	854	797	742	683	618	561	521	464
60	1315	1251	1175	1102	1037	965	908	851	801	743	689	626	558	512	461
61	1317	1241	1168	1103	1030	957	903	848	790	732	676	620	556	508	452
62	1308	1243	1170	1094	1023	954	905	850	786	729	670	615	556	499	450

63	1311	1247	1162	1099	1028	957	899	844	789	733	675	617	555	498	455
64	1315	1227	1164	1101	1018	946	894	845	776	726	670	613	549	490	443
65	1316	1230	1158	1080	1010	939	851	794	745	696	648	583	536	471	413
66	1301	1227	1152	1074	1003	922	842	763	690	641	592	544	495	465	391
67	1303	1229	1141	1068	989	916	835	738	658	604	555	488	440	412	370
68	1306	1232	1141	1064	984	911	821	739	658	560	502	450	401	343	338
69	1319	1229	1145	1054	981	898	816	735	636	554	472	397	346	301	283
70	1316	1232	1158	1058	985	895	821	722	640	540	457	373	311	246	210
71	1301	1219	1152	1068	996	901	827	728	645	545	461	352	267	208	164
72	1287	1200	1136	1054	968	906	797	720	614	532	427	341	258	172	110
73	1281	1193	1123	1039	956	900	827	718	589	506	400	317	207	141	184
74	1255	1168	1104	1018	949	895	826	749	628	483	375	269	181	102	153
75	1201	1124	1063	984	915	871	811	747	690	554	424	263	160	70	119
76	1135	1079	1003	940	873	832	766	703	665	610	464	333	182	36	79
77	1067	982	909	834	794	760	693	639	607	568	528	398	246	98	34
78	899	855	807	744	703	663	638	593	564	525	486	459	315	161	27
79	672	661	647	632	576	536	535	538	530	482	440	401	377	234	97
80	508	489	459	444	414	404	427	443	448	443	410	371	332	293	170
81	424	393	373	344	325	313	320	318	337	343	330	339	302	248	208
82	323	324	293	262	242	218	224	227	211	211	245	235	224	222	183
83	173	169	168	176	144	120	125	129	134	125	109	120	117	113	116
84	55	46	44	43	44	44	44	41	42	37	29	22	16	13	21
85	38	37	37	35	37	39	41	44	43	39	34	27	24	24	25
86	31	28	27	28	32	36	38	41	38	33	26	25	27	24	26
87	22	20	20	21	24	29	35	37	32	23	18	22	26	30	21
88	14	13	13	14	16	20	26	36	23	10	14	19	23	27	32
89	6	6	6	7	8	12	24	37	21	5	5	5	9	13	19
90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 17f.
Relative Spatial Response of ULIS (times 10,000)

AZ	ZA= 76	ZA= 77	ZA= 78	ZA= 79	ZA= 80	ZA= 81	ZA= 82	ZA= 83	ZA= 84	ZA= 85	ZA= 86	ZA= 87	ZA= 88	ZA= 89	ZA= 90
-90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-89	24	25	19	8	7	8	10	13	16	20	26	35	33	22	6
-88	32	22	13	13	16	20	25	32	36	27	13	33	26	17	11
-87	23	27	30	34	35	36	33	24	19	21	33	30	23	17	6
-86	35	36	37	35	31	24	26	26	29	31	33	28	23	17	4

-85	41	34	31	32	34	32	31	30	30	49	27	30	24	17	0
-84	40	34	40	38	33	30	28	51	77	65	25	34	24	22	0
-83	93	86	32	33	30	89	89	110	107	70	56	30	24	21	0
-82	177	118	60	93	151	128	143	148	108	63	62	30	27	22	0
-81	210	152	156	214	161	177	189	151	103	94	58	30	26	18	0
-80	247	222	277	225	210	221	192	151	107	95	54	30	26	14	0
-79	299	329	290	250	251	234	194	146	128	94	56	30	26	13	8
-78	394	354	305	280	275	231	187	144	124	76	58	30	24	15	17
-77	420	371	332	309	272	230	185	157	112	74	62	30	24	20	25
-76	435	398	350	311	273	231	190	140	93	78	66	36	28	25	34
-75	439	401	356	317	272	232	186	124	94	81	70	41	33	34	0
-74	452	407	357	320	282	234	189	112	97	85	73	48	38	28	0
-73	451	409	368	330	286	239	196	129	99	90	77	55	45	20	0
-72	461	420	378	327	289	248	205	173	140	113	85	62	39	20	0
-71	460	419	374	331	288	250	210	181	150	125	89	69	46	21	0
-70	469	426	378	338	298	253	212	187	159	129	95	76	53	28	0
-69	475	428	386	343	307	250	217	193	165	131	101	84	62	32	0
-68	474	429	388	348	302	255	225	202	168	133	107	89	59	31	0
-67	481	436	397	346	293	263	232	202	170	136	114	91	59	30	0
-66	485	441	401	348	295	268	240	203	169	137	117	90	59	28	0
-65	483	441	400	347	301	271	238	205	172	141	117	93	62	32	0
-64	489	446	394	346	304	274	240	208	175	143	121	93	66	37	0
-63	493	445	399	346	311	276	242	211	182	146	123	97	68	42	0
-62	495	450	399	345	317	277	245	214	182	151	125	98	72	45	0
-61	495	449	404	351	322	280	245	217	180	154	129	103	77	44	0
-60	500	450	410	358	320	282	248	217	179	156	130	104	76	43	0
-59	500	457	410	364	322	285	252	216	185	160	135	108	80	58	16
-58	507	461	411	372	325	288	252	219	186	161	137	109	82	69	32
-57	510	456	412	373	328	292	250	218	187	163	135	107	85	74	48
-56	507	458	414	376	337	295	257	220	187	160	136	109	87	59	65
-55	502	460	416	376	340	295	260	228	189	160	133	109	78	42	0
-54	504	459	418	379	344	305	264	232	198	162	133	110	79	43	0
-53	511	460	419	379	345	309	274	240	202	171	141	107	80	43	0
-52	512	467	427	384	342	306	272	238	206	176	142	112	80	43	0
-51	514	468	429	386	347	309	276	242	201	170	141	112	79	42	0
-50	512	470	427	388	349	307	274	240	205	171	140	111	79	42	0
-49	512	468	426	395	355	316	279	243	209	176	142	111	78	42	0
-48	511	474	428	390	351	313	272	237	205	172	139	106	72	36	0
-47	518	472	424	386	347	314	271	233	201	168	136	106	72	36	0

-46	518	471	430	389	348	305	264	232	197	165	134	107	73	36	0
-45	514	474	428	384	346	304	264	226	188	162	135	108	73	40	0
-44	519	470	425	389	344	302	267	227	189	158	135	108	88	78	71
-43	516	475	429	385	350	308	266	231	193	160	131	109	77	60	53
-42	521	472	427	390	349	315	272	228	197	164	132	110	74	42	36
-41	515	477	432	389	355	314	277	235	195	168	135	106	75	37	18
-40	518	473	435	388	348	314	272	238	197	171	139	105	80	42	0
-39	515	477	430	389	346	313	270	229	196	165	139	108	94	61	19
-38	521	472	432	383	345	305	269	227	195	165	139	109	99	80	38
-37	518	478	427	388	340	304	261	227	189	164	139	110	100	88	57
-36	524	471	428	389	341	304	261	226	187	162	132	110	85	69	77
-35	517	473	430	382	343	295	261	227	188	159	128	103	69	38	0
-34	519	474	422	383	345	296	262	220	189	159	124	99	68	38	0
-33	521	466	423	385	338	297	262	221	190	154	124	96	65	38	0
-32	514	469	426	378	340	298	255	221	191	155	126	97	62	36	0
-31	517	472	418	380	342	291	256	222	185	156	127	92	63	35	0
-30	518	465	421	382	344	293	256	223	187	158	129	94	65	36	0
-29	511	468	424	384	335	296	257	216	188	159	131	95	67	38	0
-28	514	471	428	377	338	298	259	218	189	161	132	97	68	39	0
-27	518	474	421	380	340	301	252	219	191	162	127	98	70	39	0
-26	521	468	425	383	343	294	255	220	192	164	128	100	70	39	0
-25	514	472	429	385	345	297	258	222	193	165	129	101	70	43	0
-24	515	473	430	387	337	298	260	223	194	159	131	107	98	88	82
-23	517	474	431	378	337	299	260	223	195	160	131	100	77	68	61
-22	519	464	422	379	338	299	260	224	189	161	131	100	69	47	41
-21	510	465	423	381	339	299	261	218	190	161	131	100	69	38	20
-20	512	468	424	382	341	300	261	219	191	161	131	100	69	38	0
-19	515	470	425	384	342	301	252	219	191	161	131	100	70	38	20
-18	517	471	427	385	344	293	253	220	191	161	131	100	69	58	40
-17	520	474	430	377	336	295	254	221	191	161	131	100	89	78	60
-16	520	476	421	378	337	296	255	220	190	161	131	109	89	73	80
-15	509	465	421	378	337	296	255	220	190	159	130	100	69	38	0
-14	509	465	421	378	337	296	255	221	190	159	129	99	69	38	0
-13	509	465	421	378	337	296	255	221	190	159	129	98	69	38	0
-12	509	465	421	378	337	296	255	221	191	160	129	98	68	38	0
-11	510	465	422	379	337	296	256	222	191	160	130	99	68	38	0
-10	512	466	422	380	337	296	256	222	192	161	130	100	69	38	0
-9	513	466	423	380	338	297	256	223	192	161	131	100	70	39	0
-8	515	468	423	381	339	297	257	223	193	162	132	101	69	38	0

-7	517	469	424	382	340	298	257	224	193	163	132	100	68	38	0
-6	518	471	425	383	341	299	257	224	194	163	131	99	68	38	0
-5	518	472	427	384	342	300	258	225	193	161	129	98	68	42	0
-4	518	472	427	384	342	300	259	224	192	160	128	107	97	87	79
-3	517	472	426	383	341	300	258	224	192	160	128	97	77	67	59
-2	516	471	425	383	341	299	257	223	192	160	128	97	67	47	39
-1	516	470	425	382	340	298	256	223	191	159	127	97	67	37	20
0	504	459	413	371	329	287	245	214	183	151	119	89	60	30	0
1	516	470	424	381	339	297	255	221	190	159	127	97	67	37	21
2	517	470	424	381	339	297	255	221	190	159	127	97	67	53	42
3	517	470	424	381	338	296	254	220	189	158	127	96	82	74	63
4	518	471	424	380	338	296	254	220	189	158	126	112	103	95	84
5	516	469	422	379	337	295	253	220	190	159	127	97	67	40	0
6	515	468	421	378	336	294	251	219	189	159	129	97	67	37	0
7	513	466	419	377	335	293	250	217	188	159	129	98	67	37	0
8	512	465	418	375	334	292	249	216	187	157	128	98	68	37	0
9	511	464	416	374	333	291	248	215	186	156	127	97	68	38	0
10	509	462	415	372	332	290	247	214	184	155	125	96	66	37	0
11	508	461	414	371	330	289	246	213	183	154	124	95	65	36	0
12	506	460	413	370	329	288	246	212	182	152	123	93	64	37	0
13	505	459	412	368	328	287	245	211	181	151	122	93	66	37	0
14	503	457	411	367	326	286	244	210	180	150	122	95	66	37	0
15	502	456	410	366	325	284	243	209	179	152	124	96	67	37	0
16	512	466	409	365	324	283	242	209	181	153	125	108	98	91	79
17	511	464	418	364	323	282	241	208	181	153	125	98	81	71	59
18	509	462	416	371	332	281	240	207	180	152	124	95	69	51	39
19	507	461	413	369	330	290	239	205	179	151	123	95	66	39	20
20	504	459	411	366	328	289	248	204	178	151	122	94	65	36	0
21	501	456	409	364	325	287	247	202	176	150	122	93	64	35	20
22	508	453	408	361	323	285	246	207	175	148	121	92	63	49	40
23	505	461	417	359	320	282	243	206	179	147	120	92	76	69	60
24	502	458	413	367	318	280	241	204	178	145	119	103	96	89	79
25	500	455	410	364	325	277	239	202	177	151	118	92	63	37	0
26	506	452	407	362	323	275	236	199	174	149	117	91	64	35	0
27	501	459	404	359	319	282	234	196	171	147	116	90	63	35	0
28	496	456	411	355	316	281	241	194	169	144	119	88	62	35	0
29	490	451	408	363	312	278	239	191	166	141	116	85	60	34	0
30	496	447	406	360	317	274	237	198	163	138	112	81	56	31	0
31	494	451	402	357	313	271	235	196	160	135	109	78	53	28	0

32	489	446	406	354	310	275	233	194	163	132	106	81	51	33	0
33	496	441	401	361	306	271	237	192	161	129	103	79	57	33	0
34	492	445	397	357	313	267	233	190	158	132	103	85	61	34	0
35	488	443	401	352	310	263	229	195	155	132	109	91	61	34	42
36	493	439	396	356	306	269	226	191	156	137	115	97	88	82	74
37	485	443	392	352	302	267	224	189	156	137	119	95	73	63	55
38	487	436	397	348	308	264	230	188	156	137	118	94	68	45	37
39	479	437	394	354	304	266	229	186	154	136	117	93	67	35	18
40	480	431	394	350	301	261	225	192	151	137	116	93	66	33	0
41	473	433	387	344	306	256	227	191	148	134	116	92	65	32	17
42	478	427	380	344	302	261	223	187	154	131	113	96	64	41	34
43	471	429	382	337	302	258	219	189	152	128	110	95	64	58	51
44	473	423	377	340	295	253	220	184	148	126	111	93	82	75	67
45	468	426	379	334	297	255	216	179	147	127	107	89	61	31	0
46	470	422	378	336	294	252	212	181	153	128	104	85	58	27	0
47	469	421	371	332	290	256	214	180	154	129	104	82	54	27	0
48	460	420	374	334	291	251	210	182	156	131	105	80	54	27	0
49	460	412	370	336	292	251	205	186	161	135	109	83	58	32	0
50	459	413	367	326	284	230	180	179	160	134	108	82	56	30	0
51	458	409	368	322	279	207	160	159	153	134	108	81	55	29	0
52	454	407	365	318	247	174	140	139	134	132	107	80	54	27	0
53	450	397	355	289	225	151	121	118	114	115	111	80	53	26	0
54	441	395	352	268	203	129	101	98	94	95	96	83	52	26	0
55	440	397	351	262	182	95	81	78	73	74	76	75	50	27	0
56	429	396	349	281	176	86	62	58	53	54	55	57	55	56	56
57	427	395	348	297	175	75	50	50	50	53	55	58	52	43	42
58	419	371	347	302	191	87	57	56	55	56	58	61	50	29	21
59	412	356	346	301	207	102	68	62	61	58	61	64	47	25	14
60	410	348	321	301	225	118	84	68	67	61	64	67	44	22	0
61	400	348	295	289	247	135	100	80	74	68	66	68	45	22	0
62	398	346	283	265	254	153	113	96	80	76	69	65	42	22	0
63	396	337	283	239	240	173	129	112	91	83	74	66	42	22	0
64	395	335	275	219	214	193	146	128	104	91	81	66	45	23	0
65	367	318	279	218	188	183	162	138	112	89	81	67	45	22	0
66	347	297	248	199	168	172	163	136	110	85	81	67	44	21	0
67	315	265	215	161	158	163	155	135	110	83	75	68	45	23	0
68	284	233	182	141	148	154	147	132	108	81	68	68	46	24	0
69	277	214	163	131	137	144	138	122	103	79	61	64	49	24	0
70	209	189	132	119	126	133	131	115	95	77	54	59	49	25	0

71	139	139	105	107	114	121	127	107	86	70	47	54	44	28	0
72	80	79	96	97	105	112	120	102	81	62	42	50	39	28	0
73	75	95	136	104	100	108	115	100	80	60	40	48	34	23	0
74	203	125	174	142	108	103	109	97	80	59	38	48	33	18	0
75	173	221	210	177	146	108	104	94	78	57	36	48	33	16	18
76	131	185	244	212	177	140	103	89	75	53	34	49	43	40	37
77	86	142	204	221	187	148	106	84	72	51	31	44	37	32	27
78	35	95	153	209	198	157	117	77	67	50	30	41	37	23	14
79	27	42	98	162	194	171	130	86	63	51	28	37	38	20	9
80	27	26	40	106	167	178	141	99	56	45	28	32	35	20	0
81	116	28	24	39	111	154	157	113	64	38	29	28	31	20	0
82	139	60	27	23	36	102	136	131	82	33	24	25	27	22	0
83	125	75	30	27	22	31	92	118	104	52	19	23	23	23	0
84	23	26	23	27	30	24	20	80	100	74	14	19	18	21	0
85	29	36	35	28	20	27	31	28	64	86	42	12	16	17	2
86	27	29	33	35	34	27	17	25	28	40	68	9	13	14	5
87	17	19	21	25	29	33	35	25	15	18	26	50	7	9	7
88	28	18	10	10	14	17	22	27	33	27	11	12	32	6	8
89	23	24	15	5	6	6	6	6	5	4	10	33	5	14	3
90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

The average intensity over the field of view is evaluated by integrating the diffuse intensity multiplied by this response function and dividing by the integral of the response function. The direct solar beam must also be included. This is done by multiplying the direct solar beam by the relative response at the location of the sun and dividing by the integral of the response function over the field of view.

5.2 Field of view of the DLIS

The field of view of the DLIS is centered at an azimuth angle of 1.151 degrees and at a zenith angle of 158.6 degrees. Constants for parabolic fits for the edges of the field of view are contained in the following table.

Boundary	Constant	Linear Term	Quadratic Term
Left	134.22	6.3309	-0.32633
Top	153.73	-0.018787	-0.0037792
Right	-2609.6	-1777.1	-284.53

Bottom	163.51	-0.011932	-0.0024252
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With these constants the zenith angle of each of the four boundaries can be computed at the azimuth angle of interest according to

$$\text{Nadir angle} = a + b \cdot \text{azimuth angle} + c \cdot (\text{azimuth angle})^2.$$

Note that the limits of the azimuth angle range to be used for the left boundary are 3.5 to 8 degrees, for the top boundary -2.5 to +4 degrees, for the right boundary are -2.9 to -3.1 degrees, and for the bottom boundary are -4 to +8 degrees. The response over this field is assumed to be constant.

6. Azimuth of the instrument during each IR measurement cycle

For the DLIS, the instrument collected data in 8 regions. The locations of each region for each cycle are given below.

DLIS azimuth for each region

cycle	region	samp.t.	# reads	altitude	mt start	mt center	mt end	az start	az center	az end	weights
1	1	1	10	142.08	148.90	148.94	148.99	45.63	44.45	43.27	0.03030
1	1	1	10	142.07	149.07	149.11	149.15	40.91	39.73	38.55	0.03030
1	1	1	10	142.06	149.23	149.27	149.31	36.19	35.01	33.84	0.03030
1	1	1	10	142.05	149.39	149.43	149.47	31.48	30.30	29.12	0.03030
1	1	1	12	141.60	158.16	158.21	158.26	137.85	136.47	135.08	0.03030
1	1	1	12	141.59	158.36	158.40	158.45	132.32	130.94	129.55	0.03030
1	1	1	12	141.58	158.55	158.60	158.65	126.79	125.41	124.03	0.03030
1	1	1	12	141.57	158.74	158.79	158.84	121.26	119.88	118.50	0.03030
1	1	1	10	141.10	167.78	167.82	167.86	226.03	224.90	223.78	0.03030
1	1	1	10	141.10	167.94	167.98	168.02	221.53	220.40	219.28	0.03030
1	1	1	10	141.09	168.11	168.15	168.19	217.03	215.90	214.78	0.03030
1	1	1	10	141.08	168.27	168.31	168.35	212.53	211.41	210.28	0.03030

1	1	1	10	141.07	168.43	168.47	168.51	208.03	206.91	205.78	0.03030
1	1	1	10	140.59	177.76	177.80	177.84	310.84	309.74	308.65	0.03030
1	1	1	10	140.59	177.92	177.96	178.00	306.45	305.35	304.25	0.03030
1	1	1	10	140.58	178.08	178.12	178.16	302.05	300.96	299.86	0.03030
1	1	1	10	140.57	178.24	178.28	178.32	297.66	296.56	295.47	0.03030
1	1	1	10	140.56	178.40	178.44	178.48	293.27	292.17	291.08	0.03030
1	1	1	10	140.07	188.04	188.08	188.12	34.20	33.13	32.06	0.03030
1	1	1	10	140.06	188.20	188.24	188.28	29.92	28.85	27.78	0.03030
1	1	1	10	140.06	188.36	188.40	188.44	25.64	24.57	23.50	0.03030
1	1	1	10	140.05	188.52	188.56	188.60	21.37	20.30	19.23	0.03030
1	1	1	10	140.04	188.68	188.72	188.77	17.09	16.02	14.95	0.03030
1	1	1	10	139.55	198.46	198.50	198.54	121.57	120.53	119.49	0.03030
1	1	1	10	139.54	198.62	198.66	198.70	117.41	116.37	115.33	0.03030
1	1	1	10	139.53	198.78	198.82	198.86	113.26	112.22	111.18	0.03030
1	1	1	10	139.52	198.94	198.98	199.02	109.10	108.07	107.03	0.03030
1	1	1	10	139.51	199.10	199.14	199.18	104.95	103.92	102.88	0.03030
1	1	1	10	139.00	209.39	209.43	209.47	204.46	203.46	202.46	0.03030
1	1	1	10	138.99	209.55	209.59	209.63	200.45	199.45	198.44	0.03030
1	1	1	10	138.98	209.72	209.76	209.80	196.44	195.43	194.43	0.03030
1	1	1	10	138.98	209.88	209.92	209.96	192.43	191.42	190.42	0.03030
1	1	1	10	138.97	210.04	210.08	210.12	188.42	187.42	186.42	0.03030
2	1	16	2	134.98	292.26	292.39	292.52	178.07	175.59	173.12	0.09249
2	1	16	2	134.95	292.78	292.91	293.04	168.17	165.70	163.23	0.09249
2	1	21	2	134.57	300.88	301.05	301.22	15.94	12.83	9.72	0.12139
2	1	21	2	134.54	301.56	301.73	301.90	3.50	0.39	357.29	0.12139
2	1	21	2	133.52	323.54	323.71	323.88	344.13	341.40	338.67	0.12139
2	1	21	2	133.48	324.22	324.39	324.56	333.22	330.49	327.78	0.12139
2	1	21	2	133.45	324.89	325.06	325.23	322.35	319.64	316.93	0.12139
2	1	18	2	132.82	338.76	338.91	339.05	110.00	107.88	105.76	0.10405
2	1	18	2	132.79	339.35	339.49	339.64	101.53	99.42	97.31	0.10405
3	1	23	2	128.47	436.63	436.81	437.00	143.69	142.34	141.00	0.10360
3	1	23	2	128.43	437.37	437.55	437.74	138.32	136.99	135.65	0.10360

3	1	23	2	128.40	438.11	438.29	438.48	132.99	131.67	130.35	0.10360
3	1	23	2	127.40	461.62	461.81	461.99	346.99	346.02	345.05	0.10360
3	1	23	2	127.37	462.37	462.55	462.74	343.11	342.15	341.18	0.10360
3	1	23	2	127.34	463.11	463.29	463.48	339.27	338.31	337.36	0.10360
3	1	21	2	126.33	487.15	487.32	487.49	237.25	236.68	236.11	0.09459
3	1	21	2	126.30	487.82	487.99	488.16	234.98	234.42	233.86	0.09459
3	1	21	2	126.27	488.50	488.67	488.84	232.75	232.19	231.64	0.09459
3	1	21	2	126.25	489.18	489.35	489.52	230.54	230.00	229.45	0.09459
4	1	23	2	123.31	561.10	561.28	561.47	160.03	160.24	160.45	0.09312
4	1	23	2	123.28	561.84	562.02	562.21	160.88	161.09	161.31	0.09312
4	1	23	2	123.26	562.58	562.77	562.95	161.76	161.99	162.21	0.09312
4	1	23	2	123.23	563.32	563.51	563.69	162.68	162.91	163.15	0.09312
4	1	23	2	123.20	564.06	564.25	564.43	163.63	163.87	164.12	0.09312
4	1	22	2	121.52	606.56	606.74	606.91	272.08	272.75	273.42	0.08907
4	1	22	2	121.49	607.27	607.45	607.62	274.78	275.46	276.14	0.08907
4	1	22	2	121.46	607.98	608.16	608.33	277.51	278.20	278.89	0.08907
4	1	22	2	121.44	608.69	608.87	609.04	280.27	280.96	281.66	0.08907
4	1	22	2	121.41	609.40	609.57	609.75	283.06	283.76	284.46	0.08907
4	1	22	2	121.38	610.11	610.28	610.46	285.87	286.58	287.29	0.08907
8	1	20	2	113.05	837.13	837.29	837.45	344.72	347.20	349.69	0.10582
8	1	20	2	113.03	837.77	837.93	838.09	354.66	357.14	359.63	0.10582
8	1	20	2	113.01	838.42	838.58	838.74	4.61	7.10	9.59	0.10582
8	1	22	2	112.17	862.94	863.12	863.29	37.11	40.05	42.99	0.11640
8	1	22	2	112.14	863.65	863.83	864.00	48.87	51.82	54.76	0.11640
8	1	22	2	112.12	864.36	864.54	864.71	60.66	63.61	66.56	0.11640
8	1	21	2	111.41	885.32	885.49	885.66	59.17	62.14	65.12	0.11111
8	1	21	2	111.39	886.00	886.16	886.33	71.09	74.07	77.06	0.11111
8	1	21	2	111.37	886.67	886.84	887.01	83.03	86.03	89.02	0.11111
9	1	20	2	107.52	961.12	961.28	961.44	170.43	174.38	178.34	0.10811
9	1	20	2	107.48	961.76	961.92	962.09	186.28	190.26	194.24	0.10811
9	1	19	2	106.36	977.37	977.53	977.68	237.97	242.22	246.48	0.10270
9	1	19	2	106.32	977.99	978.14	978.29	255.01	259.28	263.56	0.10270

9	1	18	2	105.86	984.30	984.45	984.59	74.85	79.08	83.32	0.09730
9	1	18	2	105.81	984.88	985.03	985.17	91.82	96.07	100.33	0.09730
9	1	20	2	105.18	993.53	993.69	993.85	353.95	359.00	4.06	0.10811
9	1	21	2	104.26	1006.00	1006.17	1006.34	36.32	41.92	47.53	0.11351
9	1	15	2	103.39	1017.87	1017.99	1018.11	76.72	80.87	85.03	0.08108
9	1	15	2	103.35	1018.36	1018.48	1018.60	93.34	97.49	101.65	0.08108
10	1	19	2	100.93	1051.77	1051.92	1052.07	209.23	214.94	220.65	0.13768
10	1	19	2	100.19	1062.25	1062.40	1062.56	245.09	250.97	256.84	0.13768
10	1	18	2	99.49	1072.25	1072.40	1072.54	273.65	279.38	285.11	0.13043
10	1	17	2	98.81	1081.93	1082.06	1082.20	300.99	306.56	312.14	0.12319
10	1	17	2	98.65	1084.36	1084.50	1084.64	40.42	46.04	51.66	0.12319
10	1	17	2	98.08	1092.53	1092.67	1092.81	19.94	25.72	31.50	0.12319
10	1	16	2	97.47	1101.56	1101.68	1101.81	46.11	51.71	57.32	0.11594
10	1	15	2	96.88	1110.34	1110.47	1110.59	73.20	78.60	84.01	0.10870
11	1	14	2	94.70	1143.51	1143.62	1143.73	184.84	190.36	195.89	0.12069
11	1	14	2	94.19	1151.40	1151.51	1151.63	214.91	220.55	226.18	0.12069
11	1	13	2	93.70	1159.17	1159.27	1159.38	246.33	251.66	257.00	0.11207
11	1	13	2	93.52	1161.97	1162.08	1162.18	29.59	34.96	40.33	0.11207
11	1	13	2	93.06	1169.26	1169.37	1169.47	46.11	51.58	57.05	0.11207
11	1	13	2	92.60	1176.58	1176.68	1176.79	70.35	75.90	81.46	0.11207
11	1	12	2	92.15	1183.88	1183.98	1184.08	100.91	106.13	111.35	0.10345
11	1	12	2	91.72	1190.92	1191.02	1191.12	124.08	129.40	134.71	0.10345
11	1	12	2	91.30	1197.83	1197.93	1198.03	146.86	152.26	157.66	0.10345
12	1	10	2	89.20	1233.06	1233.14	1233.22	15.06	19.78	24.51	0.05051
12	1	21	2	88.85	1239.08	1239.25	1239.42	7.84	17.76	27.67	0.10606
12	1	21	2	88.50	1245.05	1245.22	1245.39	356.75	6.64	16.53	0.10606
12	1	10	2	88.14	1251.34	1251.42	1251.50	3.14	7.83	12.51	0.05051
12	1	10	2	87.80	1257.41	1257.49	1257.57	354.61	359.27	3.93	0.05051
12	1	21	2	87.45	1263.44	1263.61	1263.78	342.43	352.17	1.92	0.10606
12	1	21	2	87.11	1269.44	1269.61	1269.78	326.84	336.54	346.25	0.10606
12	1	21	2	86.78	1275.32	1275.49	1275.66	303.59	313.26	322.93	0.10606
12	1	21	2	86.46	1281.15	1281.32	1281.49	276.14	285.78	295.43	0.10606

12	1	21	2	86.14	1286.97	1287.14	1287.31	246.84	256.46	266.09	0.10606
12	1	21	2	86.04	1288.65	1288.81	1288.98	342.10	351.71	1.33	0.10606
13	1	20	2	84.16	1323.64	1323.81	1323.97	158.30	167.38	176.45	0.08929
13	1	20	2	83.99	1326.82	1326.98	1327.14	336.95	346.01	355.06	0.08929
13	1	22	2	83.63	1333.72	1333.90	1334.08	3.86	13.77	23.68	0.09821
13	1	20	2	83.32	1339.64	1339.80	1339.97	333.65	342.60	351.55	0.08929
13	1	20	2	83.02	1345.36	1345.52	1345.68	289.87	298.75	307.62	0.08929
13	1	20	2	82.73	1351.07	1351.23	1351.39	242.62	251.41	260.19	0.08929
13	1	20	2	82.44	1356.79	1356.95	1357.11	192.19	200.86	209.53	0.08929
13	1	20	2	82.14	1362.58	1362.75	1362.91	141.70	150.23	158.76	0.08929
13	1	20	2	81.85	1368.35	1368.51	1368.67	84.56	92.96	101.35	0.08929
13	1	21	2	81.56	1374.17	1374.34	1374.51	25.24	33.91	42.58	0.09375
13	1	21	2	81.27	1380.00	1380.17	1380.34	321.31	329.84	338.37	0.09375
14	1	13	2	79.77	1410.54	1410.65	1410.75	12.52	17.54	22.55	0.06311
14	1	13	2	79.44	1417.61	1417.72	1417.82	350.21	355.21	0.20	0.06311
14	1	22	2	79.18	1422.90	1423.07	1423.25	241.75	250.19	258.63	0.10680
14	1	22	2	78.89	1429.02	1429.19	1429.37	172.61	181.02	189.44	0.10680
14	1	22	2	78.60	1435.27	1435.44	1435.62	108.70	117.08	125.47	0.10680
14	1	22	2	78.30	1441.55	1441.73	1441.90	44.96	53.30	61.63	0.10680
14	1	23	2	78.01	1447.85	1448.04	1448.22	340.33	348.99	357.64	0.11165
14	1	23	2	77.72	1454.17	1454.35	1454.54	273.48	282.05	290.62	0.11165
14	1	23	2	77.42	1460.59	1460.78	1460.97	208.68	217.15	225.60	0.11165
14	1	23	2	77.13	1467.10	1467.29	1467.47	143.88	152.23	160.58	0.11165
15	1	16	2	73.94	1540.75	1540.88	1541.01	14.59	19.80	25.03	0.15094
15	1	12	2	73.69	1546.84	1546.94	1547.04	260.39	264.26	268.13	0.11321
15	1	13	2	73.38	1554.26	1554.37	1554.47	193.84	197.94	202.04	0.12264
15	1	13	2	73.08	1561.67	1561.78	1561.88	118.89	122.86	126.82	0.12264
15	1	13	2	72.77	1569.23	1569.34	1569.44	39.45	43.29	47.12	0.12264
15	1	13	2	72.46	1576.87	1576.97	1577.08	317.86	321.63	325.40	0.12264
15	1	13	2	72.15	1584.62	1584.73	1584.83	233.52	237.23	240.93	0.12264
15	1	13	2	71.84	1592.48	1592.58	1592.69	148.34	152.00	155.65	0.12264
16	1	14	2	70.49	1627.50	1627.61	1627.72	301.05	305.01	308.98	0.13462

16	1	15	2	70.18	1635.95	1636.07	1636.19	237.02	241.25	245.47	0.14423
16	1	15	2	69.86	1644.53	1644.65	1644.77	172.77	176.93	181.12	0.14423
16	1	15	2	69.55	1653.10	1653.22	1653.34	110.18	114.37	118.56	0.14423
16	1	15	2	69.23	1661.87	1661.99	1662.11	45.46	49.33	53.22	0.14423
16	1	15	2	68.92	1670.57	1670.69	1670.81	326.66	330.58	334.50	0.14423
16	1	15	2	68.61	1679.46	1679.58	1679.70	255.56	259.51	263.45	0.14423
17	1	17	2	67.32	1716.60	1716.73	1716.87	29.67	34.10	38.51	0.14407
17	1	16	2	67.01	1725.99	1726.12	1726.25	326.10	330.04	333.97	0.13559
17	1	17	2	66.70	1735.35	1735.48	1735.62	248.08	252.23	256.38	0.14407
17	1	17	2	66.39	1744.96	1745.09	1745.23	185.04	189.29	193.54	0.14407
17	1	17	2	66.09	1754.48	1754.62	1754.76	110.60	114.62	118.65	0.14407
17	1	17	2	65.78	1764.30	1764.44	1764.58	36.39	40.35	44.31	0.14407
17	1	17	2	65.47	1774.25	1774.38	1774.52	319.46	323.35	327.24	0.14407
18	1	18	2	64.49	1806.56	1806.71	1806.85	171.69	175.85	180.01	0.16216
18	1	18	2	64.19	1816.91	1817.05	1817.20	103.90	107.98	112.06	0.16216
18	1	18	2	63.89	1827.25	1827.40	1827.54	37.14	41.29	45.44	0.16216
18	1	19	2	63.58	1837.92	1838.08	1838.23	339.58	343.91	348.23	0.17117
18	1	19	2	63.28	1848.75	1848.91	1849.06	281.25	285.44	289.63	0.17117
18	1	19	2	62.98	1859.79	1859.94	1860.10	222.02	226.26	230.50	0.17117
22	1	26	2	59.08	2013.72	2013.93	2014.14	14.32	19.51	24.71	0.22034
22	1	23	2	58.79	2026.33	2026.51	2026.70	326.83	331.45	336.07	0.19492
22	1	23	2	58.50	2038.83	2039.01	2039.20	281.63	286.37	291.12	0.19492
22	1	23	2	58.21	2051.33	2051.51	2051.70	237.64	242.25	246.85	0.19492
22	1	23	2	57.93	2063.83	2064.01	2064.20	195.80	200.51	205.22	0.19492
23	1	23	2	57.08	2102.09	2102.27	2102.46	47.59	51.97	56.34	0.16547
23	1	23	2	56.80	2114.86	2115.05	2115.23	344.90	349.20	353.50	0.16547
23	1	23	2	56.51	2128.31	2128.50	2128.68	300.42	304.76	309.09	0.16547
23	1	23	2	56.24	2141.08	2141.26	2141.45	237.67	241.97	246.28	0.16547
23	1	23	2	56.17	2144.20	2144.38	2144.57	309.90	314.20	318.49	0.16547
23	1	24	2	55.90	2157.23	2157.42	2157.62	240.88	245.06	249.24	0.17266
24	1	25	2	54.25	2237.99	2238.19	2238.39	93.90	97.71	101.54	0.15723
24	1	26	2	53.97	2252.31	2252.52	2252.73	3.21	7.08	10.95	0.16352

24	1	26	2	53.69	2266.60	2266.81	2267.02	270.12	274.05	277.98	0.16352
24	1	27	2	53.40	2281.49	2281.70	2281.92	191.20	195.39	199.58	0.16981
24	1	27	2	53.11	2296.74	2296.95	2297.17	114.17	118.13	122.09	0.16981
24	1	28	2	52.92	2306.23	2306.45	2306.68	284.48	288.41	292.35	0.17610
25	1	29	2	52.54	2326.82	2327.06	2327.29	276.06	280.13	284.21	0.24370
25	1	29	2	52.24	2342.61	2342.85	2343.08	193.43	197.45	201.47	0.24370
25	1	30	2	51.94	2359.06	2359.30	2359.54	109.06	113.03	116.98	0.25210
25	1	31	2	51.63	2375.86	2376.11	2376.36	17.22	21.12	25.02	0.26050
26	1	31	2	51.01	2410.28	2410.53	2410.78	194.68	198.67	202.66	0.24219
26	1	32	2	50.71	2427.40	2427.66	2427.92	108.45	112.59	116.75	0.25000
26	1	32	2	50.39	2445.40	2445.66	2445.92	36.90	40.99	45.08	0.25000
26	1	33	2	50.08	2463.03	2463.29	2463.56	307.13	311.03	314.93	0.25781
30	1	64	2	47.43	2622.40	2622.92	2623.43	280.85	289.00	297.17	0.39752
30	1	32	2	47.17	2639.27	2639.53	2639.79	187.95	191.98	196.01	0.19876
30	1	32	2	46.90	2656.41	2656.67	2656.93	91.21	95.12	99.02	0.19876
30	1	33	2	46.63	2674.25	2674.52	2674.78	357.09	0.97	4.86	0.20497
31	1	69	2	45.96	2717.64	2718.20	2718.75	311.79	320.93	330.05	0.23875
31	1	66	2	45.69	2735.24	2735.78	2736.31	234.16	242.54	250.93	0.22837
31	1	73	2	45.60	2741.24	2741.83	2742.42	328.35	337.54	346.73	0.25260
31	1	81	2	45.26	2763.95	2764.60	2765.26	331.23	342.02	352.80	0.28028
32	1	64	2	44.81	2794.90	2795.41	2795.93	133.95	142.95	151.97	0.25498
32	1	63	2	44.56	2811.59	2812.10	2812.60	62.50	71.08	79.63	0.25100
32	1	63	2	44.32	2828.25	2828.76	2829.26	337.66	346.14	354.63	0.25100
32	1	61	2	44.09	2844.19	2844.68	2845.18	242.31	250.32	258.31	0.24303
33	1	85	2	43.34	2897.23	2897.92	2898.60	352.03	2.69	13.36	0.42289
33	1	49	2	42.98	2923.42	2923.81	2924.21	57.13	63.79	70.43	0.24378
33	1	67	2	42.77	2938.76	2939.30	2939.84	310.94	319.39	327.83	0.33333
34	1	67	2	42.05	2991.53	2992.07	2992.61	25.97	34.77	43.55	0.21136
34	1	67	2	41.81	3009.47	3010.01	3010.55	322.11	330.98	339.85	0.21136
34	1	64	2	41.58	3026.57	3027.09	3027.60	239.56	247.82	256.07	0.20189
34	1	60	2	41.55	3029.03	3029.52	3030.00	278.87	286.58	294.29	0.18927
34	1	59	2	41.34	3044.88	3045.35	3045.83	169.69	177.23	184.78	0.18612

35	1	61	2	40.42	3115.97	3116.47	3116.96	179.57	186.72	193.89	0.24797
35	1	61	2	40.22	3132.33	3132.82	3133.31	59.02	66.23	73.43	0.24797
35	1	62	2	40.01	3148.87	3149.37	3149.87	296.33	302.78	309.18	0.25203
35	1	62	2	39.80	3165.51	3166.01	3166.51	153.89	160.94	168.00	0.25203
36	1	64	2	39.17	3216.06	3216.57	3217.09	131.25	138.43	145.62	0.24903
36	1	64	2	38.96	3233.09	3233.60	3234.12	9.09	16.31	23.53	0.24903
36	1	64	2	38.75	3250.27	3250.79	3251.30	244.92	251.68	258.40	0.24903
36	1	65	2	38.55	3267.53	3268.05	3268.58	100.10	106.69	113.25	0.25292
37	1	66	2	38.13	3302.42	3302.96	3303.49	235.64	243.39	251.07	0.24906
37	1	66	2	37.92	3319.98	3320.51	3321.04	115.10	122.16	129.19	0.24906
37	1	66	2	37.71	3337.66	3338.20	3338.73	350.15	357.32	4.52	0.24906
37	1	67	2	37.51	3355.46	3356.00	3356.54	237.67	245.50	253.39	0.25283
38	1	68	2	36.99	3400.15	3400.69	3401.24	205.47	213.81	222.11	0.24818
38	1	68	2	36.78	3418.35	3418.89	3419.44	105.95	113.35	120.71	0.24818
38	1	69	2	36.57	3436.66	3437.22	3437.77	348.76	356.15	3.53	0.25182
38	1	69	2	36.37	3455.09	3455.64	3456.20	229.98	237.30	244.65	0.25182
39	1	70	2	35.95	3492.24	3492.80	3493.37	36.20	44.70	53.21	0.19718
39	1	71	2	35.76	3509.34	3509.91	3510.49	294.26	302.69	311.11	0.20000
39	1	71	2	35.55	3528.22	3528.79	3529.36	195.07	202.45	209.80	0.20000
39	1	71	2	35.51	3532.41	3532.99	3533.56	248.71	255.98	263.23	0.20000
39	1	72	2	35.30	3551.36	3551.94	3552.52	125.89	133.67	141.47	0.20282
40	1	72	2	35.09	3570.56	3571.14	3571.72	19.15	26.60	34.06	0.24828
40	1	72	2	34.88	3589.75	3590.33	3590.91	269.29	277.35	285.46	0.24828
40	1	73	2	34.68	3609.12	3609.71	3610.30	195.03	203.98	212.90	0.25172
40	1	73	2	34.47	3628.63	3629.22	3629.80	117.54	126.33	135.16	0.25172
41	1	74	2	34.09	3663.96	3664.56	3665.16	268.63	277.19	285.80	0.24667
41	1	75	2	33.89	3683.75	3684.36	3684.96	187.75	195.90	204.05	0.25000
41	1	75	2	33.68	3703.73	3704.34	3704.94	107.68	116.26	124.83	0.25000
41	1	76	2	33.47	3723.81	3724.43	3725.04	28.88	37.39	45.91	0.25333
42	1	78	2	32.65	3804.69	3805.31	3805.94	54.90	62.44	69.93	0.33191
42	1	78	2	32.44	3825.35	3825.98	3826.61	291.17	299.26	307.42	0.33191
42	1	79	2	32.23	3846.22	3846.85	3847.49	203.12	211.21	219.29	0.33617

43	1	80	2	31.81	3888.40	3889.05	3889.69	331.84	337.60	343.35	0.33333
43	1	80	2	31.61	3909.56	3910.21	3910.85	189.59	197.57	205.62	0.33333
43	1	80	2	31.40	3930.93	3931.58	3932.22	143.81	153.20	162.57	0.33333
44	1	82	2	30.77	3995.86	3996.52	3997.18	35.72	47.25	58.75	0.33065
44	1	83	2	30.58	4016.26	4016.93	4017.60	32.04	43.34	54.59	0.33468
44	1	83	2	30.37	4038.31	4038.98	4039.64	23.19	33.27	43.32	0.33468
45	1	84	2	29.95	4082.81	4083.49	4084.17	285.04	294.50	303.96	0.33071
45	1	85	2	29.75	4105.25	4105.93	4106.62	232.35	241.46	250.59	0.33465
45	1	85	2	29.54	4127.84	4128.53	4129.21	165.53	174.03	182.50	0.33465
46	1	86	2	29.12	4173.48	4174.18	4174.87	290.53	298.17	305.85	0.33077
46	1	87	2	28.91	4196.49	4197.19	4197.89	205.17	213.99	222.84	0.33462
46	1	87	2	28.70	4219.67	4220.37	4221.07	139.86	149.25	158.63	0.33462
47	1	89	2	28.28	4266.44	4267.16	4267.88	354.70	2.86	11.00	0.33209
47	1	89	2	28.08	4290.07	4290.78	4291.50	270.74	279.40	288.15	0.33209
47	1	90	2	27.87	4313.81	4314.53	4315.26	167.14	173.71	180.28	0.33582
48	1	90	2	27.66	4337.84	4338.57	4339.29	39.87	47.37	54.89	0.33088
48	1	91	2	27.45	4361.77	4362.50	4363.24	299.08	306.84	314.60	0.33456
48	1	91	2	27.24	4385.97	4386.70	4387.44	186.59	193.92	201.28	0.33456
50	1	129	2	23.15	4887.35	4888.39	4889.43	123.64	133.86	144.05	0.50000
50	1	129	2	22.89	4921.04	4922.08	4923.13	101.29	111.97	122.61	0.50000
51	1	132	2	20.58	5230.56	5231.62	5232.68	31.82	41.83	51.78	0.49811
51	1	133	2	20.33	5265.50	5266.58	5267.65	342.61	352.06	1.54	0.50189
54	1	131	2	16.93	5758.28	5759.33	5760.39	144.74	154.54	164.34	0.51172
54	1	125	2	16.72	5790.14	5791.15	5792.15	82.83	92.54	102.27	0.48828
55	1	117	2	14.75	6097.44	6098.38	6099.33	114.43	123.21	132.02	0.49787
55	1	118	2	14.56	6128.50	6129.46	6130.41	55.66	65.07	74.51	0.50213
56	1	124	2	12.80	6416.28	6417.28	6418.28	158.75	168.21	177.67	0.50000
56	1	124	2	12.60	6448.93	6449.93	6450.93	94.48	103.21	111.91	0.50000
57	1	130	2	10.83	6751.47	6752.52	6753.57	53.06	61.70	70.37	0.49808
57	1	131	2	10.63	6785.79	6786.85	6787.90	335.93	344.22	352.49	0.50192
58	1	135	2	9.06	7066.43	7067.51	7068.60	99.79	107.89	115.96	0.49815
58	1	136	2	8.86	7101.97	7103.07	7104.16	357.64	5.52	13.45	0.50185

59	1	141	2	7.28	7393.94	7395.07	7396.21	17.44	25.71	33.96	0.50000
59	1	141	2	7.09	7430.93	7432.07	7433.21	283.94	292.38	300.82	0.50000
60	1	146	2	5.51	7733.25	7734.43	7735.61	8.84	17.05	25.20	0.50000
60	1	146	2	5.32	7771.50	7772.68	7773.86	266.06	274.03	282.04	0.50000
1	2	1	10	142.02	150.10	150.14	150.18	10.74	9.57	8.39	0.07143
1	2	1	10	142.01	150.26	150.30	150.34	6.04	4.86	3.69	0.07143
1	2	1	10	141.53	159.48	159.52	159.56	100.34	99.19	98.04	0.07143
1	2	1	10	141.52	159.64	159.68	159.72	95.74	94.59	93.44	0.07143
1	2	1	10	141.03	169.17	169.21	169.25	187.37	186.25	185.12	0.07143
1	2	1	10	141.03	169.33	169.37	169.41	182.88	181.76	180.64	0.07143
1	2	1	12	140.52	179.11	179.16	179.21	273.97	272.65	271.34	0.07143
1	2	1	12	140.51	179.31	179.35	179.40	268.71	267.40	266.08	0.07143
1	2	1	12	140.00	189.38	189.43	189.47	358.73	357.45	356.17	0.07143
1	2	1	12	139.99	189.57	189.62	189.67	353.61	352.33	351.05	0.07143
1	2	1	12	139.47	199.97	200.01	200.06	82.77	81.53	80.29	0.07143
1	2	1	12	139.46	200.16	200.21	200.26	77.81	76.57	75.33	0.07143
1	2	1	12	138.93	210.87	210.92	210.97	167.81	166.61	165.42	0.07143
1	2	1	12	138.92	211.06	211.11	211.16	163.02	161.82	160.62	0.07143
2	2	20	2	134.39	304.73	304.89	305.05	305.83	302.93	300.02	0.55556
2	2	16	2	132.71	341.00	341.13	341.26	77.60	75.75	73.90	0.44444
3	2	16	2	128.34	439.74	439.87	440.00	121.46	120.56	119.65	0.21053
3	2	16	2	128.31	440.25	440.38	440.51	117.85	116.95	116.06	0.21053
3	2	22	2	126.08	493.07	493.25	493.43	218.50	217.98	217.46	0.28947
3	2	22	2	126.05	493.78	493.96	494.14	216.42	215.90	215.39	0.28947
4	2	18	2	124.64	528.30	528.45	528.59	154.21	154.10	153.99	0.15385
4	2	18	2	124.62	528.88	529.03	529.17	153.78	153.67	153.57	0.15385
4	2	18	2	124.59	529.46	529.61	529.75	153.37	153.27	153.17	0.15385
4	2	21	2	123.00	569.05	569.21	569.38	170.79	171.06	171.33	0.17949
4	2	21	2	122.97	569.72	569.89	570.06	171.88	172.15	172.43	0.17949
4	2	21	2	122.94	570.40	570.57	570.74	173.00	173.28	173.57	0.17949
8	2	16	2	112.90	841.39	841.52	841.65	50.74	52.75	54.75	0.21918

8	2	16	2	112.89	841.91	842.04	842.17	58.78	60.79	62.80	0.21918
8	2	22	2	112.06	865.96	866.14	866.32	87.42	90.39	93.35	0.30137
8	2	19	2	111.32	888.20	888.36	888.51	110.15	112.86	115.58	0.26027
9	2	15	2	107.38	963.17	963.30	963.42	221.33	224.35	227.38	0.37500
9	2	11	2	105.04	995.49	995.58	995.67	55.85	58.66	61.47	0.27500
9	2	14	2	103.27	1019.48	1019.59	1019.70	131.91	135.80	139.69	0.35000
10	2	18	2	100.84	1053.11	1053.26	1053.40	259.47	264.90	270.33	0.21687
10	2	12	2	100.10	1063.55	1063.65	1063.74	294.91	298.62	302.34	0.14458
10	2	12	2	99.40	1073.49	1073.59	1073.69	322.72	326.54	330.38	0.14458
10	2	13	2	98.00	1093.72	1093.83	1093.93	70.35	74.79	79.23	0.15663
10	2	14	2	97.39	1102.70	1102.81	1102.93	95.94	100.86	105.79	0.16867
10	2	14	2	96.81	1111.43	1111.55	1111.66	121.88	126.94	132.00	0.16867
11	2	14	2	94.63	1144.53	1144.64	1144.76	235.01	240.55	246.09	0.17073
11	2	12	2	94.13	1152.41	1152.51	1152.60	265.29	270.12	274.97	0.14634
11	2	4	2	93.47	1162.87	1162.90	1162.93	75.49	77.14	78.80	0.04878
11	2	10	2	93.00	1170.21	1170.29	1170.37	95.33	99.53	103.74	0.12195
11	2	12	2	92.54	1177.53	1177.63	1177.72	120.81	125.95	131.09	0.14634
11	2	10	2	92.10	1184.76	1184.84	1184.92	148.38	152.74	157.09	0.12195
11	2	10	2	91.67	1191.81	1191.89	1191.97	172.85	177.30	181.73	0.12195
11	2	10	2	91.25	1198.71	1198.79	1198.87	195.99	200.50	205.02	0.12195
12	2	7	2	89.16	1233.82	1233.87	1233.93	59.44	62.75	66.06	0.07609
12	2	10	2	88.81	1239.76	1239.84	1239.92	47.49	52.21	56.92	0.10870
12	2	11	2	88.46	1245.93	1246.02	1246.11	48.05	53.23	58.41	0.11957
12	2	9	2	88.10	1252.10	1252.17	1252.24	47.20	51.42	55.64	0.09783
12	2	9	2	87.75	1258.16	1258.24	1258.31	38.42	42.61	46.81	0.09783
12	2	10	2	87.42	1264.12	1264.20	1264.28	21.85	26.48	31.12	0.10870
12	2	8	2	87.08	1270.11	1270.17	1270.24	5.18	8.87	12.57	0.08696
12	2	8	2	86.75	1275.99	1276.06	1276.12	341.81	345.49	349.17	0.08696
12	2	9	2	86.43	1281.83	1281.90	1281.98	314.71	318.85	322.98	0.09783
12	2	11	2	85.99	1289.77	1289.85	1289.94	45.69	50.73	55.76	0.11957
13	2	10	2	84.43	1318.58	1318.66	1318.74	233.14	237.68	242.22	0.09901
13	2	11	2	83.92	1328.18	1328.26	1328.35	53.03	58.01	62.99	0.10891

13	2	10	2	83.59	1334.57	1334.65	1334.73	51.16	55.66	60.16	0.09901
13	2	10	2	83.29	1340.30	1340.38	1340.46	9.91	14.38	18.85	0.09901
13	2	10	2	82.99	1346.01	1346.09	1346.17	325.82	330.25	334.69	0.09901
13	2	10	2	82.70	1351.72	1351.80	1351.88	278.20	282.58	286.97	0.09901
13	2	10	2	82.41	1357.46	1357.54	1357.62	228.15	232.48	236.81	0.09901
13	2	10	2	82.11	1363.24	1363.32	1363.40	176.25	180.51	184.78	0.09901
13	2	10	2	81.82	1369.01	1369.09	1369.17	118.97	123.16	127.35	0.09901
13	2	10	2	81.53	1374.85	1374.93	1375.01	59.89	64.02	68.13	0.09901
14	2	5	2	79.73	1411.44	1411.48	1411.52	55.33	57.26	59.18	0.05319
14	2	10	2	79.15	1423.61	1423.69	1423.77	275.51	279.34	283.17	0.10638
14	2	11	2	78.86	1429.77	1429.85	1429.94	208.18	212.40	216.61	0.11702
14	2	11	2	78.57	1436.00	1436.09	1436.18	143.38	147.57	151.76	0.11702
14	2	11	2	78.27	1442.26	1442.35	1442.44	78.31	82.48	86.65	0.11702
14	2	10	2	77.98	1448.59	1448.67	1448.75	14.55	18.31	22.07	0.10638
14	2	12	2	77.69	1454.93	1455.02	1455.12	308.48	312.94	317.41	0.12766
14	2	12	2	77.39	1461.37	1461.47	1461.56	243.98	248.39	252.80	0.12766
14	2	12	2	77.10	1467.86	1467.96	1468.05	177.99	182.34	186.69	0.12766
15	2	17	2	74.26	1532.94	1533.08	1533.22	58.74	64.30	69.86	0.16832
15	2	14	2	73.65	1547.80	1547.92	1548.03	298.76	303.27	307.78	0.13861
15	2	13	2	73.34	1555.23	1555.34	1555.44	231.63	235.73	239.81	0.12871
15	2	14	2	73.04	1562.67	1562.79	1562.90	156.57	160.81	165.05	0.13861
15	2	14	2	72.73	1570.23	1570.34	1570.46	75.99	80.12	84.25	0.13861
15	2	14	2	72.42	1577.90	1578.01	1578.13	354.83	358.85	2.88	0.13861
15	2	15	2	72.11	1585.66	1585.78	1585.90	269.96	274.22	278.49	0.14851
16	2	16	2	70.45	1628.58	1628.70	1628.83	338.94	343.46	347.99	0.13913
16	2	16	2	70.14	1637.04	1637.17	1637.30	275.22	279.70	284.18	0.13913
16	2	16	2	69.82	1645.62	1645.75	1645.88	210.60	215.05	219.51	0.13913
16	2	17	2	69.50	1654.27	1654.41	1654.54	150.66	155.41	160.16	0.14783
16	2	16	2	69.19	1662.98	1663.11	1663.24	81.02	85.17	89.32	0.13913
16	2	17	2	68.88	1671.74	1671.88	1672.02	4.80	9.24	13.69	0.14783
16	2	17	2	68.56	1680.71	1680.85	1680.98	296.30	300.78	305.25	0.14783
17	2	17	2	67.28	1717.81	1717.95	1718.09	68.83	73.24	77.63	0.13281

17	2	18	2	66.97	1727.17	1727.31	1727.46	1.84	6.22	10.59	0.14063
17	2	18	2	66.66	1736.64	1736.79	1736.93	287.55	291.99	296.44	0.14063
17	2	18	2	66.35	1746.18	1746.33	1746.47	222.98	227.44	231.90	0.14063
17	2	19	2	66.04	1755.84	1756.00	1756.15	150.56	155.04	159.53	0.14844
17	2	19	2	65.73	1765.65	1765.80	1765.96	75.19	79.59	84.00	0.14844
17	2	19	2	65.43	1775.58	1775.73	1775.88	357.20	1.55	5.90	0.14844
18	2	20	2	64.45	1807.87	1808.03	1808.19	209.17	213.80	218.42	0.16129
18	2	20	2	64.15	1818.21	1818.37	1818.53	140.42	144.96	149.50	0.16129
18	2	20	2	63.84	1828.74	1828.90	1829.06	79.53	84.13	88.72	0.16129
18	2	21	2	63.54	1839.39	1839.56	1839.73	20.98	25.75	30.52	0.16935
18	2	21	2	63.24	1850.25	1850.42	1850.59	322.08	326.67	331.26	0.16935
18	2	22	2	62.93	1861.36	1861.54	1861.72	265.53	270.45	275.36	0.17742
22	2	22	2	59.04	2015.49	2015.67	2015.84	58.30	62.69	67.08	0.18487
22	2	24	2	58.75	2027.94	2028.13	2028.33	7.03	11.85	16.69	0.20168
22	2	24	2	58.46	2040.44	2040.63	2040.83	322.97	327.95	332.93	0.20168
22	2	24	2	58.17	2052.94	2053.13	2053.33	277.95	282.83	287.71	0.20168
22	2	25	2	57.89	2065.45	2065.66	2065.86	237.12	242.22	247.32	0.21008
23	2	25	2	57.04	2103.71	2103.91	2104.11	85.76	90.49	95.23	0.19841
23	2	25	2	56.75	2117.16	2117.36	2117.56	38.18	42.87	47.55	0.19841
23	2	25	2	56.48	2129.93	2130.14	2130.34	338.22	342.91	347.60	0.19841
23	2	26	2	56.14	2145.84	2146.05	2146.26	347.95	352.79	357.63	0.20635
23	2	25	2	55.86	2158.91	2159.11	2159.31	277.10	281.45	285.81	0.19841
24	2	29	2	54.21	2239.84	2240.07	2240.30	128.94	133.37	137.81	0.19728
24	2	28	2	53.93	2254.13	2254.36	2254.58	36.84	41.01	45.18	0.19048
24	2	29	2	53.65	2268.71	2268.95	2269.18	309.63	314.00	318.36	0.19728
24	2	30	2	53.36	2283.63	2283.87	2284.11	232.34	236.97	241.57	0.20408
24	2	31	2	52.89	2308.17	2308.42	2308.67	318.19	322.50	326.81	0.21088
25	2	31	2	52.50	2328.84	2329.09	2329.34	311.41	315.82	320.25	0.23308
25	2	33	2	52.20	2344.90	2345.16	2345.43	232.56	237.11	241.64	0.24812
25	2	34	2	51.90	2361.31	2361.59	2361.86	145.86	150.30	154.75	0.25564
25	2	35	2	51.59	2378.14	2378.43	2378.71	52.75	57.13	61.51	0.26316
26	2	35	2	50.97	2412.43	2412.72	2413.00	229.05	233.57	238.07	0.24648

26	2	36	2	50.66	2429.97	2430.26	2430.55	149.79	154.46	159.13	0.25352
26	2	36	2	50.35	2447.62	2447.91	2448.20	71.89	76.45	81.00	0.25352
26	2	35	2	50.04	2465.29	2465.58	2465.86	340.26	344.37	348.47	0.24648
30	2	34	2	47.41	2624.32	2624.59	2624.87	311.25	315.62	319.98	0.25185
30	2	34	2	47.14	2641.47	2641.75	2642.02	222.29	226.55	230.82	0.25185
30	2	36	2	46.86	2658.84	2659.13	2659.42	127.92	132.31	136.69	0.26667
30	2	31	2	46.59	2676.49	2676.74	2676.99	29.77	33.41	37.06	0.22963
31	2	32	2	45.93	2719.66	2719.91	2720.17	344.83	349.04	353.24	0.42105
31	2	44	2	45.55	2745.05	2745.41	2745.76	27.85	33.41	38.96	0.57895
32	2	33	2	44.78	2796.80	2797.07	2797.33	167.19	171.84	176.49	0.27049
32	2	33	2	44.54	2813.47	2813.73	2814.00	94.09	98.52	102.96	0.27049
32	2	22	2	44.30	2830.05	2830.22	2830.40	7.70	10.66	13.62	0.18033
32	2	34	2	44.06	2846.44	2846.72	2846.99	278.78	283.21	287.63	0.27869
33	2	51	2	43.29	2901.35	2901.76	2902.17	56.21	62.66	69.14	0.60714
33	2	33	2	42.74	2940.75	2941.01	2941.28	341.87	345.98	350.11	0.39286
34	2	36	2	42.27	2975.84	2976.13	2976.42	144.78	149.02	153.27	0.26866
34	2	36	2	42.02	2993.78	2994.07	2994.36	62.75	67.48	72.21	0.26866
34	2	31	2	41.79	3011.43	3011.68	3011.93	354.26	358.36	2.46	0.23134
34	2	31	2	41.53	3030.83	3031.08	3031.33	307.49	311.44	315.41	0.23134
35	2	33	2	40.40	3117.81	3118.07	3118.34	206.22	210.10	213.98	0.24627
35	2	33	2	40.20	3134.25	3134.51	3134.78	87.13	91.04	94.95	0.24627
35	2	34	2	39.99	3150.79	3151.07	3151.34	320.98	324.45	327.92	0.25373
35	2	34	2	39.78	3167.44	3167.71	3167.99	181.12	185.00	188.90	0.25373
36	2	35	2	39.15	3218.01	3218.29	3218.57	158.41	162.33	166.26	0.25000
36	2	35	2	38.94	3235.09	3235.37	3235.65	37.02	40.96	44.88	0.25000
36	2	35	2	38.73	3252.26	3252.54	3252.82	270.70	274.31	277.91	0.25000
36	2	35	2	38.53	3269.53	3269.81	3270.09	125.16	128.68	132.21	0.25000
37	2	36	2	38.11	3304.41	3304.70	3304.99	264.23	268.35	272.45	0.25000
37	2	36	2	37.90	3322.01	3322.30	3322.59	141.96	145.78	149.61	0.25000
37	2	36	2	37.69	3339.72	3340.01	3340.30	17.97	21.92	25.86	0.25000
37	2	36	2	37.48	3357.53	3357.82	3358.11	267.98	272.28	276.59	0.25000
38	2	37	2	37.18	3384.16	3384.46	3384.76	317.89	322.53	327.18	0.25000

38	2	37	2	36.97	3402.25	3402.55	3402.85	237.28	241.74	246.19	0.25000
38	2	37	2	36.76	3420.47	3420.76	3421.06	134.40	138.37	142.34	0.25000
38	2	37	2	36.55	3438.79	3439.09	3439.38	17.00	20.95	24.91	0.25000
39	2	38	2	36.14	3475.76	3476.07	3476.38	153.48	157.90	162.30	0.33333
39	2	38	2	35.74	3511.53	3511.83	3512.14	326.36	330.85	335.32	0.33333
39	2	38	2	35.49	3534.53	3534.84	3535.15	275.50	279.32	283.13	0.33333
40	2	39	2	35.07	3572.72	3573.03	3573.35	46.92	50.97	55.02	0.24684
40	2	39	2	34.86	3591.99	3592.31	3592.62	300.71	305.17	309.64	0.24684
40	2	40	2	34.65	3611.39	3611.71	3612.03	229.29	234.12	238.93	0.25316
40	2	40	2	34.45	3630.90	3631.22	3631.55	151.63	156.48	161.32	0.25316
41	2	40	2	34.07	3666.22	3666.54	3666.87	301.25	305.94	310.64	0.28369
41	2	41	2	33.87	3686.07	3686.40	3686.74	219.09	223.59	228.09	0.29078
41	2	41	2	33.66	3706.05	3706.38	3706.71	140.52	145.20	149.88	0.29078
41	2	19	2	33.45	3725.89	3726.05	3726.20	57.84	59.99	62.13	0.13475
42	2	42	2	32.63	3807.03	3807.37	3807.71	82.69	86.62	90.53	0.32813
42	2	43	2	32.42	3827.77	3828.12	3828.47	322.68	327.28	331.89	0.33594
42	2	43	2	32.21	3848.64	3848.99	3849.34	233.92	238.32	242.72	0.33594
43	2	43	2	31.79	3890.78	3891.13	3891.47	353.06	356.15	359.25	0.32824
43	2	44	2	31.59	3912.03	3912.38	3912.74	220.57	225.14	229.73	0.33588
43	2	44	2	31.38	3933.43	3933.78	3934.14	179.99	185.09	190.17	0.33588
44	2	45	2	30.96	3976.61	3976.97	3977.33	88.85	94.33	99.78	0.49451
44	2	1	2	30.76	3997.95	3997.95	3997.96	72.06	72.20	72.33	0.01099
44	2	45	2	30.56	4018.81	4019.18	4019.54	74.93	80.96	86.98	0.49451
45	2	46	2	29.93	4085.40	4085.77	4086.14	321.26	326.46	331.68	0.33094
45	2	46	2	29.72	4107.87	4108.25	4108.62	267.31	272.24	277.19	0.33094
45	2	47	2	29.52	4130.49	4130.86	4131.24	198.14	202.76	207.37	0.33813
46	2	47	2	29.10	4176.15	4176.52	4176.90	320.13	324.42	328.73	0.32867
46	2	48	2	28.89	4199.18	4199.57	4199.96	239.05	243.90	248.74	0.33566
46	2	48	2	28.68	4222.38	4222.76	4223.15	176.13	181.30	186.46	0.33566
47	2	48	2	28.47	4245.71	4246.09	4246.48	108.69	113.44	118.21	0.33103
47	2	48	2	28.26	4269.20	4269.58	4269.97	26.08	30.50	34.92	0.33103
47	2	49	2	28.05	4292.82	4293.21	4293.61	304.27	309.11	313.98	0.33793

48	2	49	2	27.64	4340.51	4340.91	4341.30	67.59	71.74	75.89	0.32886
48	2	50	2	27.43	4364.58	4364.99	4365.39	328.80	333.05	337.28	0.33557
48	2	50	2	27.22	4388.80	4389.20	4389.60	214.96	219.05	223.12	0.33557
50	2	69	2	23.12	4891.12	4891.68	4892.23	160.54	165.95	171.35	0.49286
50	2	71	2	22.86	4925.05	4925.62	4926.20	142.29	148.11	153.91	0.50714
51	2	72	2	20.81	5199.82	5200.40	5200.98	83.84	89.91	95.99	0.49655
51	2	73	2	20.55	5234.65	5235.24	5235.83	70.02	75.44	80.84	0.50345
54	2	72	2	17.14	5727.77	5728.35	5728.93	218.43	223.84	229.24	0.65455
54	2	38	2	16.91	5761.84	5762.15	5762.45	177.76	180.59	183.44	0.34545
55	2	64	2	14.93	6070.07	6070.59	6071.10	221.08	225.70	230.33	0.50000
55	2	64	2	14.73	6101.07	6101.59	6102.10	148.29	153.13	157.95	0.50000
56	2	68	2	12.78	6419.98	6420.53	6421.08	193.71	198.85	203.98	0.50000
56	2	68	2	12.58	6452.73	6453.28	6453.83	127.49	132.23	136.98	0.50000
57	2	72	2	10.81	6755.35	6755.93	6756.51	85.23	90.10	94.98	0.50000
57	2	72	2	10.61	6789.69	6790.27	6790.85	6.38	10.89	15.40	0.50000
58	2	74	2	9.04	7070.39	7070.99	7071.59	129.20	133.60	138.03	0.49664
58	2	75	2	8.84	7106.23	7106.83	7107.44	28.50	32.95	37.42	0.50336
59	2	77	2	7.27	7398.12	7398.74	7399.36	47.86	52.36	56.84	0.49677
59	2	78	2	7.07	7435.23	7435.86	7436.49	315.85	320.55	325.25	0.50323
60	2	80	2	5.49	7737.61	7738.25	7738.90	39.02	43.48	47.92	0.50000
60	2	80	2	5.30	7775.91	7776.56	7777.20	296.02	300.41	304.80	0.50000
1	3	1	12	141.96	151.24	151.29	151.34	337.38	335.98	334.57	0.02857
1	3	1	12	141.95	151.44	151.49	151.53	331.76	330.35	328.94	0.02857
1	3	1	12	141.94	151.63	151.68	151.73	326.13	324.73	323.32	0.02857
1	3	1	12	141.93	151.82	151.87	151.92	320.51	319.10	317.70	0.02857
1	3	1	10	141.47	160.64	160.68	160.72	67.29	66.15	65.00	0.02857
1	3	1	10	141.46	160.80	160.84	160.88	62.71	61.57	60.42	0.02857
1	3	1	10	141.46	160.96	161.00	161.04	58.13	56.99	55.84	0.02857
1	3	1	10	141.45	161.12	161.16	161.20	53.55	52.41	51.27	0.02857
1	3	1	10	141.44	161.28	161.32	161.36	48.98	47.84	46.69	0.02857
1	3	1	10	140.97	170.38	170.42	170.46	153.75	152.63	151.51	0.02857

1	3	1	10	140.96	170.54	170.58	170.62	149.27	148.16	147.04	0.02857
1	3	1	10	140.95	170.70	170.74	170.78	144.80	143.68	142.57	0.02857
1	3	1	10	140.95	170.86	170.90	170.94	140.33	139.21	138.10	0.02857
1	3	1	10	140.94	171.02	171.06	171.10	135.86	134.75	133.63	0.02857
1	3	1	10	140.46	180.41	180.45	180.49	238.75	237.66	236.57	0.02857
1	3	1	10	140.45	180.57	180.61	180.65	234.39	233.30	232.21	0.02857
1	3	1	10	140.44	180.73	180.77	180.81	230.03	228.94	227.85	0.02857
1	3	1	10	140.43	180.89	180.93	180.98	225.67	224.58	223.49	0.02857
1	3	1	10	140.43	181.06	181.10	181.14	221.31	220.22	219.13	0.02857
1	3	1	10	139.94	190.70	190.74	190.78	323.81	322.75	321.69	0.02857
1	3	1	10	139.93	190.86	190.90	190.94	319.56	318.50	317.44	0.02857
1	3	1	10	139.92	191.02	191.06	191.10	315.31	314.25	313.19	0.02857
1	3	1	10	139.91	191.18	191.22	191.26	311.07	310.01	308.95	0.02857
1	3	1	10	139.91	191.35	191.39	191.43	306.82	305.76	304.70	0.02857
1	3	1	10	139.40	201.35	201.39	201.43	47.26	46.23	45.20	0.02857
1	3	1	10	139.39	201.51	201.55	201.59	43.14	42.11	41.08	0.02857
1	3	1	10	139.39	201.68	201.72	201.76	39.02	37.99	36.96	0.02857
1	3	1	10	139.38	201.84	201.88	201.92	34.91	33.88	32.85	0.02857
1	3	1	10	139.37	202.00	202.04	202.08	30.79	29.76	28.74	0.02857
1	3	1	10	138.86	212.22	212.26	212.30	134.51	133.52	132.52	0.02857
1	3	1	10	138.85	212.38	212.42	212.46	130.53	129.54	128.55	0.02857
1	3	1	10	138.84	212.54	212.58	212.62	126.56	125.56	124.57	0.02857
1	3	1	10	138.84	212.70	212.74	212.78	122.58	121.59	120.59	0.02857
1	3	1	10	138.83	212.86	212.90	212.94	118.61	117.61	116.62	0.02857
1	3	1	10	138.82	213.02	213.06	213.10	114.64	113.64	112.65	0.02857
2	3	19	2	134.27	307.25	307.40	307.56	260.63	257.91	255.18	0.14504
2	3	19	2	134.25	307.86	308.02	308.17	249.74	247.03	244.31	0.14504
2	3	19	2	134.22	308.48	308.63	308.78	238.89	236.19	233.48	0.14504
2	3	18	2	133.35	327.23	327.37	327.52	285.30	283.01	280.72	0.13740
2	3	18	2	133.32	327.81	327.95	328.10	276.15	273.87	271.59	0.13740
2	3	19	2	132.62	343.07	343.22	343.38	48.00	45.83	43.65	0.14504
2	3	19	2	132.59	343.68	343.84	343.99	39.32	37.15	34.99	0.14504

3	3	23	2	128.20	442.88	443.06	443.25	99.85	98.59	97.34	0.09237
3	3	23	2	128.17	443.62	443.80	443.99	94.84	93.59	92.35	0.09237
3	3	23	2	128.14	444.36	444.54	444.73	89.88	88.65	87.42	0.09237
3	3	21	2	127.23	465.73	465.90	466.07	326.02	325.19	324.35	0.08434
3	3	21	2	127.20	466.41	466.58	466.74	322.69	321.87	321.04	0.08434
3	3	21	2	127.17	467.08	467.25	467.42	319.40	318.58	317.77	0.08434
3	3	21	2	127.14	467.76	467.93	468.10	316.14	315.33	314.53	0.08434
3	3	24	2	125.91	497.27	497.47	497.66	206.66	206.14	205.63	0.09639
3	3	24	2	125.88	498.05	498.24	498.44	204.60	204.10	203.59	0.09639
3	3	24	2	125.85	498.82	499.02	499.21	202.59	202.10	201.60	0.09639
3	3	24	2	125.81	499.60	499.79	499.98	200.63	200.14	199.66	0.09639
4	3	23	2	124.45	532.97	533.15	533.34	151.27	151.18	151.10	0.09312
4	3	23	2	124.42	533.71	533.90	534.08	150.93	150.85	150.77	0.09312
4	3	23	2	124.39	534.45	534.64	534.82	150.61	150.54	150.47	0.09312
4	3	23	2	124.36	535.19	535.38	535.57	150.33	150.26	150.19	0.09312
4	3	23	2	124.33	535.94	536.12	536.31	150.07	150.01	149.95	0.09312
4	3	22	2	122.78	574.42	574.59	574.77	180.18	180.52	180.86	0.08907
4	3	22	2	122.76	575.13	575.30	575.48	181.55	181.89	182.24	0.08907
4	3	22	2	122.73	575.84	576.01	576.19	182.95	183.30	183.66	0.08907
4	3	22	2	122.70	576.54	576.72	576.90	184.38	184.74	185.11	0.08907
4	3	22	2	122.67	577.25	577.43	577.61	185.84	186.21	186.59	0.08907
4	3	22	2	122.64	577.96	578.14	578.32	187.34	187.72	188.10	0.08907
8	3	22	2	112.80	844.52	844.70	844.88	99.71	102.50	105.29	0.11828
8	3	22	2	112.77	845.23	845.41	845.59	110.87	113.66	116.46	0.11828
8	3	22	2	112.75	845.94	846.12	846.30	122.05	124.85	127.65	0.11828
8	3	21	2	112.00	868.01	868.18	868.35	121.71	124.55	127.40	0.11290
8	3	21	2	111.97	868.69	868.86	869.03	133.10	135.95	138.80	0.11290
8	3	21	2	111.95	869.37	869.54	869.71	144.51	147.37	150.23	0.11290
8	3	19	2	111.26	890.11	890.26	890.41	143.94	146.67	149.39	0.10215
8	3	19	2	111.24	890.72	890.87	891.03	154.86	157.59	160.32	0.10215
8	3	19	2	111.21	891.33	891.49	891.64	165.79	168.52	171.26	0.10215
9	3	19	2	107.23	965.21	965.37	965.52	272.84	276.74	280.66	0.16964

9	3	19	2	107.19	965.83	965.98	966.13	288.50	292.43	296.37	0.16964
9	3	22	2	104.92	997.07	997.24	997.42	105.79	111.45	117.11	0.19643
9	3	15	2	104.11	1008.09	1008.21	1008.33	105.65	109.69	113.72	0.13393
9	3	15	2	104.07	1008.57	1008.70	1008.82	121.79	125.83	129.87	0.13393
9	3	22	2	103.17	1020.75	1020.93	1021.11	175.89	182.03	188.17	0.19643
10	3	19	2	100.75	1054.36	1054.51	1054.66	305.97	311.72	317.47	0.16522
10	3	18	2	100.02	1064.62	1064.77	1064.91	336.19	341.79	347.39	0.15652
10	3	17	2	99.33	1074.55	1074.69	1074.82	4.59	10.04	15.49	0.14783
10	3	15	2	98.56	1085.59	1085.71	1085.83	90.76	95.74	100.72	0.13043
10	3	16	2	97.93	1094.73	1094.86	1094.99	113.10	118.58	124.05	0.13913
10	3	15	2	97.32	1103.72	1103.85	1103.97	140.65	145.94	151.24	0.13043
10	3	15	2	96.74	1112.45	1112.57	1112.69	167.46	172.90	178.33	0.13043
11	3	14	2	94.57	1145.48	1145.59	1145.71	281.74	287.28	292.84	0.13861
11	3	13	2	94.07	1153.32	1153.42	1153.53	310.92	316.19	321.45	0.12871
11	3	13	2	93.42	1163.56	1163.67	1163.77	111.11	116.50	121.89	0.12871
11	3	13	2	92.95	1171.02	1171.13	1171.23	137.87	143.35	148.84	0.12871
11	3	12	2	92.49	1178.39	1178.49	1178.58	166.67	171.82	176.97	0.11881
11	3	12	2	92.05	1185.57	1185.66	1185.76	192.01	197.26	202.49	0.11881
11	3	12	2	91.62	1192.60	1192.70	1192.79	216.40	221.74	227.07	0.11881
11	3	12	2	91.20	1199.49	1199.58	1199.68	239.35	244.78	250.20	0.11881
12	3	10	2	89.12	1234.48	1234.56	1234.64	98.17	102.90	107.62	0.06024
12	3	21	2	88.76	1240.57	1240.74	1240.91	94.67	104.59	114.49	0.12651
12	3	10	2	88.41	1246.70	1246.79	1246.87	93.22	97.93	102.63	0.06024
12	3	10	2	88.06	1252.81	1252.89	1252.97	88.40	93.08	97.76	0.06024
12	3	21	2	87.71	1258.94	1259.11	1259.28	83.13	92.91	102.68	0.12651
12	3	21	2	87.36	1264.94	1265.11	1265.28	68.67	78.40	88.13	0.12651
12	3	21	2	87.03	1270.87	1271.04	1271.21	49.05	58.75	68.44	0.12651
12	3	21	2	86.70	1276.74	1276.91	1277.08	24.62	34.29	43.95	0.12651
12	3	21	2	86.38	1282.60	1282.77	1282.94	358.34	7.98	17.62	0.12651
12	3	10	2	85.95	1290.53	1290.61	1290.69	89.15	93.73	98.29	0.06024
13	3	20	2	84.38	1319.36	1319.52	1319.68	277.21	286.29	295.38	0.09756
13	3	22	2	83.87	1329.05	1329.22	1329.40	101.91	111.85	121.81	0.10732

13	3	20	2	83.54	1335.36	1335.52	1335.68	95.27	104.27	113.26	0.09756
13	3	20	2	83.24	1341.07	1341.23	1341.39	52.83	61.77	70.70	0.09756
13	3	20	2	82.95	1346.79	1346.95	1347.11	8.37	17.22	26.07	0.09756
13	3	20	2	82.66	1352.50	1352.66	1352.82	320.29	329.05	337.80	0.09756
13	3	20	2	82.36	1358.25	1358.42	1358.58	270.97	279.60	288.24	0.09756
13	3	21	2	82.07	1364.02	1364.19	1364.36	217.54	226.47	235.40	0.10244
13	3	21	2	81.78	1369.81	1369.98	1370.15	160.44	169.22	178.00	0.10244
13	3	21	2	81.49	1375.63	1375.80	1375.97	99.84	108.48	117.11	0.10244
14	3	12	2	79.70	1412.14	1412.24	1412.33	88.85	93.47	98.10	0.05911
14	3	11	2	79.39	1418.57	1418.65	1418.74	35.56	39.79	44.02	0.05419
14	3	22	2	79.11	1424.43	1424.61	1424.78	314.62	323.06	331.49	0.10837
14	3	22	2	78.81	1430.62	1430.80	1430.98	248.75	257.16	265.57	0.10837
14	3	22	2	78.52	1436.85	1437.03	1437.21	183.77	192.15	200.53	0.10837
14	3	22	2	78.23	1443.12	1443.30	1443.48	118.83	127.15	135.48	0.10837
14	3	23	2	77.94	1449.43	1449.62	1449.81	54.00	62.63	71.27	0.11330
14	3	23	2	77.64	1455.81	1455.99	1456.18	349.00	357.55	6.09	0.11330
14	3	23	2	77.35	1462.26	1462.45	1462.64	284.74	293.17	301.61	0.11330
14	3	23	2	77.06	1468.76	1468.95	1469.14	218.58	226.90	235.23	0.11330
15	3	16	2	74.22	1534.04	1534.17	1534.30	103.17	108.39	113.62	0.15385
15	3	10	2	73.89	1541.85	1541.93	1542.01	59.32	62.59	65.85	0.09615
15	3	13	2	73.61	1548.71	1548.81	1548.92	334.75	338.92	343.09	0.12500
15	3	13	2	73.30	1556.12	1556.22	1556.33	266.17	270.24	274.31	0.12500
15	3	13	2	73.00	1563.60	1563.71	1563.81	191.33	195.25	199.17	0.12500
15	3	13	2	72.69	1571.17	1571.28	1571.38	110.49	114.32	118.16	0.12500
15	3	13	2	72.38	1578.85	1578.96	1579.06	28.75	32.48	36.22	0.12500
15	3	13	2	72.07	1586.63	1586.74	1586.84	304.29	307.98	311.66	0.12500
16	3	15	2	70.41	1629.61	1629.73	1629.85	15.12	19.35	23.59	0.14151
16	3	15	2	70.10	1638.10	1638.22	1638.34	311.86	316.03	320.21	0.14151
16	3	15	2	69.78	1646.66	1646.78	1646.91	246.52	250.71	254.89	0.14151
16	3	15	2	69.47	1655.35	1655.47	1655.59	188.11	192.30	196.49	0.14151
16	3	15	2	69.15	1664.04	1664.16	1664.28	115.28	119.19	123.10	0.14151
16	3	15	2	68.84	1672.85	1672.97	1673.09	40.61	44.53	48.45	0.14151

16	3	16	2	68.52	1681.83	1681.96	1682.09	332.88	337.09	341.30	0.15094
17	3	16	2	67.25	1718.96	1719.09	1719.22	105.49	109.61	113.72	0.13445
17	3	17	2	66.93	1728.31	1728.45	1728.59	36.30	40.44	44.57	0.14286
17	3	17	2	66.62	1737.81	1737.95	1738.09	323.45	327.67	331.91	0.14286
17	3	17	2	66.31	1747.34	1747.48	1747.62	258.60	262.79	266.98	0.14286
17	3	17	2	66.01	1757.05	1757.18	1757.32	185.68	189.68	193.68	0.14286
17	3	17	2	65.70	1766.88	1767.01	1767.15	110.34	114.26	118.19	0.14286
17	3	18	2	65.39	1776.80	1776.95	1777.09	32.02	36.15	40.28	0.15126
18	3	18	2	64.41	1809.15	1809.29	1809.44	245.83	249.97	254.11	0.15929
18	3	18	2	64.11	1819.50	1819.64	1819.79	176.76	180.85	184.94	0.15929
18	3	19	2	63.81	1830.03	1830.18	1830.33	116.27	120.63	124.98	0.16814
18	3	19	2	63.50	1840.72	1840.87	1841.03	58.39	62.69	66.99	0.16814
18	3	19	2	63.20	1851.61	1851.77	1851.92	358.94	3.07	7.19	0.16814
18	3	20	2	62.89	1862.74	1862.90	1863.06	303.74	308.21	312.68	0.17699
22	3	22	2	59.01	2016.97	2017.15	2017.33	95.08	99.48	103.89	0.19298
22	3	23	2	58.71	2029.46	2029.64	2029.83	44.90	49.54	54.19	0.20175
22	3	23	2	58.43	2041.96	2042.14	2042.33	2.10	6.89	11.67	0.20175
22	3	23	2	58.14	2054.46	2054.64	2054.83	316.35	321.08	325.81	0.20175
22	3	23	2	57.86	2066.99	2067.18	2067.37	276.00	280.67	285.34	0.20175
23	3	23	2	57.01	2105.28	2105.47	2105.65	122.62	126.96	131.29	0.19658
23	3	23	2	56.72	2118.73	2118.92	2119.10	74.78	79.11	83.45	0.19658
23	3	23	2	56.44	2131.51	2131.69	2131.88	14.80	19.11	23.42	0.19658
23	3	24	2	56.10	2147.45	2147.64	2147.84	24.89	29.33	33.77	0.20513
23	3	24	2	55.83	2160.49	2160.68	2160.87	311.22	315.38	319.55	0.20513
24	3	26	2	54.18	2241.60	2241.81	2242.02	162.48	166.46	170.45	0.19403
24	3	26	2	53.90	2255.88	2256.09	2256.30	69.21	73.11	77.00	0.19403
24	3	27	2	53.61	2270.51	2270.73	2270.95	343.19	347.24	351.31	0.20149
24	3	27	2	53.32	2285.49	2285.70	2285.92	267.51	271.59	275.67	0.20149
24	3	28	2	52.85	2310.07	2310.30	2310.52	350.92	354.79	358.64	0.20896
25	3	29	2	52.46	2330.77	2331.00	2331.24	345.61	349.76	353.92	0.23770
25	3	30	2	52.16	2346.90	2347.14	2347.38	266.61	270.71	274.81	0.24590
25	3	31	2	51.86	2363.36	2363.61	2363.86	179.00	183.04	187.08	0.25410

25	3	32	2	51.55	2380.26	2380.51	2380.77	85.47	89.45	93.44	0.26230
26	3	31	2	50.93	2414.56	2414.81	2415.06	263.08	267.07	271.07	0.24031
26	3	32	2	50.62	2432.17	2432.42	2432.68	185.06	189.21	193.35	0.24806
26	3	33	2	50.31	2449.79	2450.06	2450.33	105.93	110.06	114.20	0.25581
26	3	33	2	50.01	2467.44	2467.71	2467.97	11.47	15.34	19.20	0.25581
30	3	65	2	47.37	2626.68	2627.21	2627.73	348.93	357.30	5.68	0.33505
30	3	65	2	47.10	2643.83	2644.35	2644.88	258.83	266.92	275.02	0.33505
30	3	32	2	46.83	2661.03	2661.29	2661.55	161.00	164.89	168.78	0.16495
30	3	32	2	46.56	2678.57	2678.82	2679.08	59.99	63.75	67.51	0.16495
31	3	67	2	45.89	2722.00	2722.54	2723.08	23.02	31.79	40.54	0.42675
31	3	81	2	45.50	2747.99	2748.65	2749.30	74.12	84.46	94.82	0.51592
31	3	9	2	45.24	2766.07	2766.15	2766.22	6.29	7.48	8.69	0.05732
32	3	63	2	44.74	2799.09	2799.60	2800.11	207.17	216.02	224.86	0.25200
32	3	63	2	44.50	2815.75	2816.26	2816.77	131.87	140.21	148.55	0.25200
32	3	61	2	44.27	2832.03	2832.52	2833.01	40.80	48.99	57.19	0.24400
32	3	63	2	44.03	2848.76	2849.26	2849.77	315.99	324.11	332.22	0.25200
33	3	94	2	43.23	2904.77	2905.53	2906.29	110.45	122.51	134.60	0.50811
33	3	26	2	42.94	2926.51	2926.72	2926.93	109.14	112.68	116.22	0.14054
33	3	65	2	42.71	2943.08	2943.61	2944.13	17.96	26.00	34.04	0.35135
34	3	66	2	42.23	2978.29	2978.83	2979.36	180.71	188.56	196.41	0.25781
34	3	66	2	41.99	2996.24	2996.77	2997.30	102.77	111.52	120.32	0.25781
34	3	65	2	41.75	3013.71	3014.23	3014.76	31.61	40.17	48.74	0.25391
34	3	59	2	41.50	3033.00	3033.47	3033.95	341.81	349.33	356.84	0.23047
35	3	62	2	40.37	3120.06	3120.56	3121.06	239.02	246.32	253.64	0.24900
35	3	62	2	40.16	3136.52	3137.02	3137.52	120.70	128.12	135.57	0.24900
35	3	62	2	39.95	3153.09	3153.59	3154.09	349.91	356.18	2.44	0.24900
35	3	63	2	39.74	3169.75	3170.25	3170.76	213.74	220.90	228.03	0.25301
36	3	64	2	39.12	3220.36	3220.88	3221.40	191.17	198.35	205.53	0.24806
36	3	64	2	38.91	3237.45	3237.97	3238.48	69.81	76.94	84.07	0.24806
36	3	65	2	38.70	3254.63	3255.16	3255.68	300.78	307.31	313.80	0.25194
36	3	65	2	38.49	3271.93	3272.46	3272.98	155.31	161.93	168.56	0.25194
37	3	66	2	38.08	3306.83	3307.37	3307.90	298.25	305.60	312.90	0.24719

37	3	67	2	37.87	3324.45	3324.99	3325.53	173.99	181.10	188.21	0.25094
37	3	67	2	37.66	3342.17	3342.71	3343.25	51.38	58.79	66.21	0.25094
37	3	67	2	37.45	3360.00	3360.54	3361.08	304.93	313.13	321.35	0.25094
38	3	68	2	37.14	3386.65	3387.19	3387.74	356.52	5.04	13.57	0.24818
38	3	68	2	36.94	3404.76	3405.31	3405.85	274.42	282.44	290.43	0.24818
38	3	69	2	36.73	3422.99	3423.55	3424.10	167.87	175.22	182.55	0.25182
38	3	69	2	36.52	3441.33	3441.88	3442.44	50.58	57.92	65.24	0.25182
39	3	70	2	36.10	3478.34	3478.90	3479.47	190.54	198.72	206.92	0.24823
39	3	70	2	35.91	3495.35	3495.92	3496.48	83.10	91.60	100.15	0.24823
39	3	71	2	35.71	3514.13	3514.70	3515.28	4.20	12.41	20.60	0.25177
39	3	71	2	35.45	3537.15	3537.73	3538.30	307.88	314.87	321.86	0.25177
40	3	72	2	35.04	3575.37	3575.95	3576.53	81.19	88.71	96.20	0.24658
40	3	73	2	34.83	3594.66	3595.25	3595.84	338.95	347.49	356.07	0.25000
40	3	73	2	34.62	3614.07	3614.66	3615.25	268.91	277.44	285.92	0.25000
40	3	74	2	34.41	3633.61	3634.21	3634.80	192.41	201.40	210.36	0.25342
41	3	75	2	34.04	3668.95	3669.56	3670.16	341.17	350.02	358.86	0.24834
41	3	75	2	33.83	3688.83	3689.44	3690.04	256.86	265.26	273.71	0.24834
41	3	76	2	33.63	3708.82	3709.44	3710.05	179.81	188.49	197.17	0.25166
41	3	76	2	33.43	3728.14	3728.76	3729.37	89.44	98.11	106.80	0.25166
42	3	78	2	32.59	3809.89	3810.52	3811.15	115.07	122.05	128.98	0.33051
42	3	79	2	32.39	3830.65	3831.29	3831.93	1.21	9.78	18.37	0.33475
42	3	79	2	32.18	3851.55	3852.18	3852.82	270.80	278.93	287.05	0.33475
43	3	80	2	31.76	3893.71	3894.35	3895.00	19.42	25.35	31.32	0.33058
43	3	81	2	31.55	3914.98	3915.63	3916.29	259.56	268.57	277.80	0.33471
43	3	81	2	31.35	3936.39	3937.05	3937.70	222.31	231.51	240.69	0.33471
44	3	82	2	30.93	3979.62	3980.28	3980.94	133.90	143.75	153.59	0.33065
44	3	83	2	30.73	3999.91	4000.58	4001.25	106.44	118.22	130.06	0.33468
44	3	83	2	30.53	4021.86	4022.52	4023.19	125.01	135.90	146.78	0.33468
45	3	84	2	30.11	4066.15	4066.83	4067.51	56.69	65.92	75.17	0.33071
45	3	85	2	29.90	4088.49	4089.17	4089.86	4.56	14.14	23.70	0.33465
45	3	85	2	29.69	4110.99	4111.67	4112.36	308.65	317.74	326.82	0.33465
46	3	86	2	29.28	4156.41	4157.11	4157.80	124.00	130.51	136.96	0.32950

46	3	87	2	29.07	4179.31	4180.02	4180.72	356.50	4.69	12.89	0.33333
46	3	88	2	28.86	4202.38	4203.09	4203.80	278.93	287.79	296.65	0.33716
47	3	89	2	28.44	4248.94	4249.66	4250.38	148.43	157.24	166.02	0.33209
47	3	89	2	28.23	4272.46	4273.17	4273.89	63.47	71.80	80.16	0.33209
47	3	90	2	28.02	4296.09	4296.82	4297.54	344.39	353.14	1.83	0.33582
48	3	91	2	27.60	4343.83	4344.56	4345.29	102.87	110.85	118.87	0.33212
48	3	91	2	27.39	4367.92	4368.65	4369.39	3.78	11.43	19.05	0.33212
48	3	92	2	27.18	4392.16	4392.90	4393.65	249.31	257.00	264.74	0.33577
50	3	128	2	23.34	4862.15	4863.18	4864.21	212.80	223.86	234.95	0.49805
50	3	129	2	23.08	4895.76	4896.80	4897.84	205.74	215.94	226.20	0.50195
51	3	132	2	20.77	5204.62	5205.69	5206.75	133.95	145.02	156.06	0.49811
51	3	133	2	20.52	5239.47	5240.54	5241.61	113.63	123.20	132.69	0.50189
54	3	131	2	17.10	5732.54	5733.59	5734.65	263.02	272.99	282.96	0.51172
54	3	125	2	16.88	5765.64	5766.65	5767.65	213.00	222.36	231.72	0.48828
55	3	117	2	14.90	6074.35	6075.29	6076.23	259.62	268.24	276.89	0.49787
55	3	118	2	14.70	6105.34	6106.30	6107.25	188.44	197.40	206.44	0.50213
56	3	124	2	12.75	6424.50	6425.50	6426.50	235.72	244.92	254.06	0.49799
56	3	125	2	12.55	6457.27	6458.28	6459.28	166.42	174.95	183.42	0.50201
57	3	131	2	10.78	6760.10	6761.16	6762.21	125.26	134.23	143.20	0.50000
57	3	131	2	10.59	6794.45	6795.51	6796.56	43.18	51.25	59.30	0.50000
58	3	136	2	9.01	7075.32	7076.42	7077.51	165.63	173.70	181.78	0.50000
58	3	136	2	8.81	7111.18	7112.28	7113.37	65.64	74.10	82.66	0.50000
59	3	141	2	7.24	7403.24	7404.38	7405.52	84.79	92.93	101.05	0.49823
59	3	142	2	7.04	7440.38	7441.52	7442.67	354.32	2.88	11.43	0.50177
60	3	146	2	5.46	7742.90	7744.08	7745.25	75.22	83.19	91.10	0.50000
60	3	146	2	5.27	7781.21	7782.39	7783.57	332.15	340.18	348.21	0.50000
1	4	1	10	142.37	143.32	143.36	143.40	210.36	209.16	207.97	0.03030
1	4	1	10	142.36	143.48	143.52	143.56	205.57	204.38	203.18	0.03030
1	4	1	10	142.35	143.64	143.68	143.72	200.79	199.59	198.40	0.03030
1	4	1	10	142.35	143.80	143.84	143.88	196.01	194.81	193.61	0.03030
1	4	1	12	141.90	152.40	152.44	152.49	303.89	302.49	301.08	0.03030

1	4	1	12	141.89	152.59	152.64	152.69	298.28	296.88	295.47	0.03030
1	4	1	12	141.88	152.78	152.83	152.88	292.67	291.27	289.87	0.03030
1	4	1	12	141.87	152.98	153.03	153.07	287.06	285.66	284.26	0.03030
1	4	1	10	141.41	161.83	161.87	161.91	33.44	32.29	31.15	0.03030
1	4	1	10	141.40	161.99	162.03	162.07	28.87	27.73	26.59	0.03030
1	4	1	10	141.39	162.15	162.19	162.23	24.30	23.16	22.02	0.03030
1	4	1	10	141.39	162.32	162.36	162.40	19.74	18.60	17.45	0.03030
1	4	1	10	141.38	162.48	162.52	162.56	15.17	14.03	12.89	0.03030
1	4	1	10	140.91	171.61	171.65	171.69	119.57	118.45	117.34	0.03030
1	4	1	10	140.90	171.77	171.81	171.85	115.11	113.99	112.88	0.03030
1	4	1	10	140.89	171.94	171.98	172.02	110.65	109.54	108.42	0.03030
1	4	1	10	140.88	172.10	172.14	172.18	106.19	105.08	103.97	0.03030
1	4	1	10	140.88	172.26	172.30	172.34	101.74	100.62	99.51	0.03030
1	4	1	10	140.39	181.68	181.73	181.77	204.33	203.25	202.16	0.03030
1	4	1	10	140.39	181.85	181.89	181.93	199.99	198.90	197.82	0.03030
1	4	1	10	140.38	182.01	182.05	182.09	195.64	194.55	193.47	0.03030
1	4	1	10	140.37	182.17	182.21	182.25	191.29	190.21	189.12	0.03030
1	4	1	10	140.36	182.33	182.37	182.41	186.95	185.86	184.77	0.03030
1	4	1	10	139.87	192.00	192.04	192.08	289.65	288.60	287.54	0.03030
1	4	1	10	139.86	192.16	192.20	192.24	285.42	284.36	283.30	0.03030
1	4	1	10	139.86	192.32	192.36	192.40	281.19	280.13	279.07	0.03030
1	4	1	10	139.85	192.48	192.52	192.56	276.96	275.90	274.84	0.03030
1	4	1	10	139.84	192.64	192.68	192.72	272.73	271.67	270.61	0.03030
1	4	1	10	139.33	202.69	202.73	202.77	13.13	12.10	11.08	0.03030
1	4	1	10	139.33	202.85	202.89	202.93	9.03	8.00	6.98	0.03030
1	4	1	10	139.32	203.01	203.05	203.09	4.93	3.90	2.88	0.03030
1	4	1	10	139.31	203.18	203.22	203.26	0.83	359.81	358.78	0.03030
1	4	1	10	139.30	203.34	203.38	203.42	356.73	355.71	354.69	0.03030
2	4	16	2	135.37	283.94	284.07	284.20	340.86	338.29	335.73	0.12800
2	4	16	2	135.35	284.46	284.58	284.71	330.60	328.04	325.48	0.12800
2	4	19	2	134.15	309.87	310.02	310.18	214.33	211.65	208.96	0.15200
2	4	19	2	134.12	310.48	310.64	310.79	203.60	200.93	198.25	0.15200

2	4	19	2	134.09	311.10	311.25	311.40	192.91	190.25	187.58	0.15200
2	4	18	2	133.26	329.14	329.29	329.43	255.21	252.95	250.69	0.14400
2	4	18	2	133.23	329.72	329.87	330.02	246.18	243.93	241.68	0.14400
3	4	23	2	128.07	446.00	446.18	446.37	79.12	77.91	76.71	0.09237
3	4	23	2	128.03	446.74	446.92	447.11	74.30	73.11	71.91	0.09237
3	4	23	2	128.00	447.48	447.67	447.85	69.53	68.34	67.16	0.09237
3	4	21	2	127.08	469.29	469.46	469.63	308.89	308.10	307.31	0.08434
3	4	21	2	127.05	469.97	470.14	470.31	305.74	304.96	304.18	0.08434
3	4	21	2	127.02	470.65	470.82	470.99	302.63	301.86	301.09	0.08434
3	4	21	2	126.99	471.32	471.49	471.66	299.56	298.80	298.04	0.08434
3	4	24	2	125.74	501.44	501.64	501.83	196.09	195.62	195.16	0.09639
3	4	24	2	125.70	502.22	502.41	502.61	194.25	193.79	193.34	0.09639
3	4	24	2	125.67	502.99	503.19	503.38	192.44	192.00	191.56	0.09639
3	4	24	2	125.64	503.77	503.96	504.15	190.68	190.24	189.81	0.09639
4	4	23	2	124.26	537.65	537.84	538.03	149.61	149.58	149.54	0.09312
4	4	23	2	124.23	538.40	538.58	538.77	149.47	149.43	149.40	0.09312
4	4	23	2	124.20	539.14	539.32	539.51	149.34	149.31	149.28	0.09312
4	4	23	2	124.17	539.88	540.07	540.25	149.23	149.21	149.20	0.09312
4	4	23	2	124.14	540.62	540.81	540.99	149.17	149.16	149.15	0.09312
4	4	22	2	122.57	579.77	579.95	580.13	191.26	191.66	192.05	0.08907
4	4	22	2	122.54	580.48	580.66	580.83	192.86	193.26	193.67	0.08907
4	4	22	2	122.52	581.19	581.37	581.54	194.48	194.89	195.31	0.08907
4	4	22	2	122.49	581.90	582.08	582.25	196.14	196.56	196.98	0.08907
4	4	22	2	122.46	582.61	582.79	582.96	197.83	198.25	198.68	0.08907
4	4	22	2	122.43	583.32	583.50	583.67	199.54	199.97	200.40	0.08907
8	4	22	2	112.69	847.59	847.77	847.95	148.21	151.03	153.85	0.11828
8	4	22	2	112.67	848.30	848.48	848.66	159.49	162.31	165.14	0.11828
8	4	22	2	112.64	849.01	849.19	849.37	170.79	173.62	176.46	0.11828
8	4	21	2	111.90	870.89	871.06	871.23	170.26	173.12	175.99	0.11290
8	4	21	2	111.88	871.57	871.74	871.91	181.72	184.59	187.46	0.11290
8	4	21	2	111.85	872.25	872.42	872.58	193.21	196.09	198.97	0.11290
8	4	19	2	111.17	892.79	892.94	893.09	191.75	194.50	197.24	0.10215

8	4	19	2	111.15	893.40	893.55	893.70	202.74	205.49	208.24	0.10215
8	4	19	2	111.13	894.01	894.16	894.32	213.75	216.50	219.26	0.10215
9	4	19	2	107.09	967.24	967.39	967.54	324.93	328.92	332.91	0.14286
9	4	19	2	107.05	967.85	968.00	968.16	340.92	344.92	348.93	0.14286
9	4	21	2	105.71	986.25	986.41	986.58	131.96	136.98	142.01	0.15789
9	4	22	2	104.81	998.57	998.74	998.92	153.79	159.49	165.19	0.16541
9	4	15	2	103.99	1009.72	1009.84	1009.96	160.11	164.17	168.23	0.11278
9	4	15	2	103.95	1010.20	1010.32	1010.45	176.35	180.41	184.47	0.11278
9	4	22	2	103.06	1022.28	1022.45	1022.63	228.72	234.88	241.04	0.16541
10	4	19	2	100.65	1055.67	1055.82	1055.98	355.33	1.09	6.86	0.16379
10	4	18	2	99.93	1065.90	1066.04	1066.19	25.43	31.05	36.67	0.15517
10	4	17	2	99.24	1075.77	1075.91	1076.05	53.36	58.82	64.29	0.14655
10	4	16	2	98.49	1086.69	1086.82	1086.95	136.31	141.64	146.97	0.13793
10	4	16	2	97.86	1095.87	1096.00	1096.13	161.46	166.96	172.46	0.13793
10	4	15	2	97.25	1104.83	1104.95	1105.07	189.04	194.35	199.67	0.12931
10	4	15	2	96.67	1113.54	1113.66	1113.78	216.45	221.91	227.36	0.12931
11	4	14	2	94.51	1146.47	1146.58	1146.69	330.15	335.72	341.28	0.14000
11	4	13	2	94.01	1154.30	1154.40	1154.51	359.93	5.20	10.48	0.13000
11	4	13	2	93.36	1164.51	1164.62	1164.72	160.07	165.48	170.88	0.13000
11	4	13	2	92.89	1171.95	1172.05	1172.16	186.41	191.90	197.40	0.13000
11	4	12	2	92.43	1179.31	1179.41	1179.50	215.65	220.81	225.97	0.12000
11	4	12	2	91.99	1186.46	1186.56	1186.66	240.56	245.81	251.07	0.12000
11	4	12	2	91.57	1193.47	1193.57	1193.66	264.49	269.84	275.19	0.12000
11	4	11	2	91.15	1200.36	1200.45	1200.53	288.22	293.21	298.20	0.11000
12	4	10	2	89.43	1229.18	1229.26	1229.34	147.99	152.71	157.43	0.06024
12	4	10	2	89.08	1235.24	1235.32	1235.40	142.57	147.29	152.02	0.06024
12	4	21	2	88.72	1241.32	1241.49	1241.66	138.55	148.46	158.36	0.12651
12	4	10	2	88.37	1247.48	1247.56	1247.64	138.38	143.07	147.78	0.06024
12	4	10	2	88.02	1253.57	1253.66	1253.74	132.85	137.53	142.20	0.06024
12	4	21	2	87.66	1259.69	1259.86	1260.03	126.41	136.18	145.95	0.12651
12	4	21	2	87.32	1265.69	1265.86	1266.03	111.74	121.46	131.19	0.12651
12	4	21	2	86.99	1271.61	1271.78	1271.95	91.51	101.20	110.89	0.12651

12	4	21	2	86.66	1277.48	1277.65	1277.82	66.50	76.15	85.82	0.12651
12	4	21	2	86.34	1283.32	1283.49	1283.66	39.64	49.28	58.92	0.12651
13	4	20	2	84.35	1320.07	1320.23	1320.39	317.20	326.28	335.36	0.09756
13	4	22	2	83.83	1329.83	1330.01	1330.18	145.78	155.73	165.67	0.10732
13	4	20	2	83.51	1336.07	1336.23	1336.39	134.86	143.85	152.83	0.09756
13	4	20	2	83.21	1341.79	1341.95	1342.11	92.58	101.51	110.43	0.09756
13	4	20	2	82.91	1347.50	1347.66	1347.82	47.31	56.16	65.00	0.09756
13	4	20	2	82.62	1353.21	1353.38	1353.54	359.24	7.99	16.73	0.09756
13	4	21	2	82.32	1358.97	1359.14	1359.31	309.38	318.44	327.49	0.10244
13	4	20	2	82.03	1364.75	1364.91	1365.07	255.78	264.26	272.74	0.09756
13	4	21	2	81.74	1370.54	1370.71	1370.87	198.04	206.80	215.55	0.10244
13	4	21	2	81.45	1376.36	1376.53	1376.70	136.82	145.43	154.04	0.10244
14	4	13	2	79.65	1413.03	1413.14	1413.24	131.61	136.62	141.63	0.06047
14	4	22	2	79.36	1419.07	1419.25	1419.43	59.77	68.22	76.67	0.10233
14	4	22	2	79.07	1425.19	1425.37	1425.55	351.05	359.48	7.91	0.10233
14	4	22	2	78.78	1431.40	1431.57	1431.75	285.47	293.88	302.29	0.10233
14	4	22	2	78.49	1437.64	1437.81	1437.99	220.71	229.09	237.46	0.10233
14	4	22	2	78.19	1443.91	1444.09	1444.27	155.91	164.23	172.54	0.10233
14	4	23	2	77.90	1450.22	1450.41	1450.60	90.77	99.39	108.01	0.10698
14	4	23	2	77.61	1456.60	1456.79	1456.97	25.76	34.29	42.82	0.10698
14	4	23	2	77.31	1463.07	1463.26	1463.44	321.40	329.83	338.26	0.10698
14	4	23	2	77.02	1469.58	1469.76	1469.95	255.11	263.43	271.74	0.10698
15	4	16	2	74.17	1535.16	1535.29	1535.42	148.55	153.76	158.98	0.14953
15	4	13	2	73.88	1542.25	1542.35	1542.46	75.30	79.54	83.77	0.12150
15	4	13	2	73.57	1549.63	1549.74	1549.84	11.57	15.72	19.87	0.12150
15	4	13	2	73.27	1557.05	1557.15	1557.26	302.07	306.12	310.17	0.12150
15	4	13	2	72.96	1564.54	1564.64	1564.75	226.24	230.14	234.04	0.12150
15	4	13	2	72.65	1572.12	1572.22	1572.33	144.98	148.82	152.66	0.12150
15	4	13	2	72.34	1579.82	1579.92	1580.03	63.12	66.84	70.55	0.12150
15	4	13	2	72.03	1587.61	1587.71	1587.82	338.52	342.19	345.86	0.12150
16	4	14	2	70.69	1622.29	1622.41	1622.52	118.28	122.24	126.20	0.13462
16	4	15	2	70.37	1630.66	1630.79	1630.91	52.11	56.34	60.57	0.14423

16	4	15	2	70.06	1639.16	1639.29	1639.41	348.54	352.69	356.85	0.14423
16	4	15	2	69.74	1647.74	1647.86	1647.98	283.62	287.81	292.00	0.14423
16	4	15	2	69.43	1656.44	1656.56	1656.68	225.68	229.82	233.96	0.14423
16	4	15	2	69.11	1665.13	1665.25	1665.37	150.51	154.43	158.36	0.14423
16	4	15	2	68.80	1673.94	1674.07	1674.19	76.16	80.09	84.02	0.14423
17	4	17	2	67.21	1720.11	1720.25	1720.39	142.22	146.58	150.94	0.14286
17	4	16	2	66.90	1729.51	1729.64	1729.76	72.19	76.06	79.93	0.13445
17	4	17	2	66.58	1739.01	1739.14	1739.28	0.35	4.61	8.87	0.14286
17	4	17	2	66.28	1748.53	1748.67	1748.80	294.62	298.75	302.87	0.14286
17	4	17	2	65.97	1758.26	1758.39	1758.53	220.95	224.94	228.93	0.14286
17	4	17	2	65.66	1768.10	1768.24	1768.38	145.33	149.24	153.14	0.14286
17	4	18	2	65.35	1778.05	1778.20	1778.34	67.62	71.78	75.94	0.15126
18	4	18	2	64.38	1810.44	1810.59	1810.73	282.55	286.66	290.77	0.15929
18	4	18	2	64.07	1820.79	1820.93	1821.08	213.16	217.26	221.36	0.15929
18	4	19	2	63.77	1831.34	1831.50	1831.65	153.58	157.93	162.27	0.16814
18	4	19	2	63.47	1842.06	1842.21	1842.37	95.90	100.19	104.47	0.16814
18	4	19	2	63.16	1852.98	1853.13	1853.28	35.69	39.83	43.96	0.16814
18	4	20	2	62.86	1864.13	1864.29	1864.45	342.21	346.68	351.16	0.17699
22	4	23	2	58.97	2018.51	2018.70	2018.89	133.29	137.88	142.48	0.20536
22	4	22	2	58.68	2031.04	2031.21	2031.39	84.51	88.96	93.42	0.19643
22	4	22	2	58.39	2043.54	2043.71	2043.89	42.82	47.39	51.96	0.19643
22	4	22	2	58.10	2056.04	2056.21	2056.39	356.81	1.36	5.90	0.19643
22	4	23	2	57.82	2068.56	2068.74	2068.93	315.36	320.03	324.70	0.20536
23	4	23	2	56.97	2106.88	2107.06	2107.25	159.83	164.14	168.44	0.19658
23	4	23	2	56.68	2120.33	2120.51	2120.70	112.16	116.52	120.88	0.19658
23	4	23	2	56.41	2133.10	2133.29	2133.47	51.90	56.22	60.52	0.19658
23	4	24	2	56.07	2149.08	2149.27	2149.46	62.02	66.40	70.77	0.20513
23	4	24	2	55.80	2162.12	2162.32	2162.51	346.44	350.60	354.75	0.20513
24	4	25	2	54.42	2229.27	2229.47	2229.67	288.90	292.68	296.46	0.19084
24	4	26	2	54.14	2243.38	2243.59	2243.80	196.31	200.29	204.27	0.19847
24	4	26	2	53.86	2257.67	2257.88	2258.09	102.55	106.46	110.38	0.19847
24	4	27	2	53.58	2272.33	2272.55	2272.77	17.21	21.29	25.36	0.20611

24	4	27	2	53.29	2287.36	2287.58	2287.80	302.62	306.66	310.69	0.20611
25	4	29	2	52.43	2332.74	2332.98	2333.21	20.81	24.97	29.14	0.23770
25	4	30	2	52.12	2348.92	2349.16	2349.40	300.84	304.92	309.00	0.24590
25	4	31	2	51.82	2365.44	2365.69	2365.94	212.51	216.52	220.53	0.25410
25	4	32	2	51.51	2382.40	2382.66	2382.92	118.52	122.47	126.42	0.26230
26	4	32	2	50.90	2416.68	2416.94	2417.20	296.94	301.06	305.19	0.24806
26	4	33	2	50.58	2434.35	2434.62	2434.88	220.17	224.44	228.71	0.25581
26	4	32	2	50.27	2452.02	2452.28	2452.54	140.46	144.45	148.44	0.24806
26	4	32	2	49.97	2469.66	2469.92	2470.18	43.88	47.65	51.42	0.24806
30	4	64	2	47.33	2628.83	2629.34	2629.86	23.19	31.43	39.67	0.32990
30	4	64	2	47.06	2645.97	2646.49	2647.00	291.92	299.87	307.80	0.32990
30	4	33	2	46.80	2663.22	2663.49	2663.75	193.89	197.89	201.88	0.17010
30	4	33	2	46.52	2680.75	2681.02	2681.28	91.83	95.71	99.57	0.17010
31	4	68	2	46.13	2706.29	2706.83	2707.38	120.93	130.12	139.36	0.31481
31	4	67	2	45.86	2724.21	2724.75	2725.29	58.80	67.52	76.22	0.31019
31	4	81	2	45.46	2750.65	2751.31	2751.96	116.35	126.75	137.15	0.37500
32	4	63	2	44.71	2801.17	2801.68	2802.19	243.34	252.15	260.95	0.25200
32	4	63	2	44.47	2817.84	2818.35	2818.85	166.10	174.40	182.69	0.25200
32	4	61	2	44.24	2834.05	2834.55	2835.04	74.50	82.68	90.85	0.24400
32	4	63	2	44.00	2850.84	2851.34	2851.85	349.15	357.21	5.26	0.25200
33	4	95	2	43.19	2907.89	2908.65	2909.42	160.16	172.47	184.81	0.42035
33	4	67	2	42.92	2927.73	2928.27	2928.81	129.69	138.82	147.94	0.29646
33	4	64	2	42.68	2945.23	2945.75	2946.26	50.83	58.72	66.61	0.28319
34	4	67	2	42.20	2980.49	2981.03	2981.57	213.27	221.34	229.44	0.25869
34	4	67	2	41.96	2998.44	2998.98	2999.52	139.19	148.16	157.15	0.25869
34	4	65	2	41.73	3015.85	3016.38	3016.90	66.58	75.10	83.63	0.25097
34	4	60	2	41.47	3034.97	3035.46	3035.94	13.03	20.68	28.32	0.23166
35	4	62	2	40.35	3122.10	3122.60	3123.10	268.96	276.30	283.62	0.24900
35	4	62	2	40.14	3138.58	3139.08	3139.58	151.30	158.72	166.15	0.24900
35	4	62	2	39.93	3155.16	3155.66	3156.16	15.80	22.08	28.39	0.24900
35	4	63	2	39.72	3171.83	3172.33	3172.84	242.92	249.98	257.02	0.25301
36	4	63	2	39.30	3205.52	3206.02	3206.53	343.75	350.88	358.01	0.24609

36	4	64	2	39.09	3222.48	3223.00	3223.52	220.69	227.88	235.07	0.25000
36	4	64	2	38.88	3239.59	3240.10	3240.62	99.35	106.48	113.62	0.25000
36	4	65	2	38.68	3256.79	3257.31	3257.84	327.42	333.86	340.29	0.25391
37	4	66	2	38.05	3309.03	3309.56	3310.09	328.33	335.55	342.76	0.24812
37	4	66	2	37.84	3326.66	3327.19	3327.72	203.08	210.11	217.13	0.24812
37	4	67	2	37.64	3344.38	3344.92	3345.46	81.79	89.25	96.72	0.25188
37	4	67	2	37.43	3362.23	3362.77	3363.31	339.01	347.32	355.66	0.25188
38	4	68	2	37.12	3388.90	3389.44	3389.99	31.50	40.01	48.52	0.24818
38	4	68	2	36.91	3407.02	3407.57	3408.12	307.39	315.30	323.18	0.24818
38	4	69	2	36.70	3425.26	3425.82	3426.38	197.84	205.15	212.48	0.25182
38	4	69	2	36.49	3443.62	3444.17	3444.73	80.73	88.04	95.33	0.25182
39	4	70	2	36.08	3480.65	3481.21	3481.78	224.18	232.42	240.67	0.24648
39	4	71	2	35.89	3497.67	3498.25	3498.82	118.31	127.05	135.80	0.25000
39	4	71	2	35.68	3516.48	3517.05	3517.62	37.66	45.73	53.74	0.25000
39	4	72	2	35.43	3539.52	3540.10	3540.68	336.71	343.77	350.84	0.25352
40	4	72	2	35.01	3577.77	3578.35	3578.93	112.07	119.53	126.98	0.24658
40	4	73	2	34.80	3597.06	3597.65	3598.24	14.00	22.65	31.32	0.25000
40	4	73	2	34.60	3616.50	3617.09	3617.68	303.76	312.11	320.44	0.25000
40	4	74	2	34.39	3636.05	3636.64	3637.24	228.97	237.86	246.74	0.25342
41	4	74	2	34.02	3671.42	3672.02	3672.61	17.18	25.86	34.48	0.24585
41	4	75	2	33.81	3691.32	3691.92	3692.52	291.57	300.09	308.62	0.24917
41	4	76	2	33.60	3711.32	3711.94	3712.55	215.18	223.83	232.46	0.25249
41	4	76	2	33.40	3730.65	3731.26	3731.88	125.07	133.84	142.63	0.25249
42	4	78	2	32.57	3812.47	3813.10	3813.73	143.42	150.27	157.09	0.33191
42	4	78	2	32.36	3833.25	3833.88	3834.51	36.09	44.48	52.82	0.33191
42	4	79	2	32.15	3854.15	3854.79	3855.42	304.07	312.23	320.38	0.33617
43	4	80	2	31.74	3896.35	3897.00	3897.64	44.07	50.28	56.59	0.33195
43	4	80	2	31.53	3917.64	3918.29	3918.93	297.85	307.73	317.78	0.33195
43	4	81	2	31.32	3939.07	3939.73	3940.38	259.76	268.75	277.66	0.33610
44	4	82	2	30.90	3982.32	3982.98	3983.64	174.17	184.11	194.10	0.33065
44	4	83	2	30.71	4002.64	4003.31	4003.98	154.68	166.56	178.47	0.33468
44	4	83	2	30.50	4024.60	4025.27	4025.94	169.43	180.19	190.92	0.33468

45	4	84	2	30.08	4068.92	4069.60	4070.28	94.56	103.80	113.04	0.33071
45	4	85	2	29.88	4091.29	4091.97	4092.66	43.54	53.04	62.49	0.33465
45	4	85	2	29.67	4113.79	4114.48	4115.16	345.78	354.81	3.81	0.33465
46	4	86	2	29.25	4159.25	4159.94	4160.64	150.42	156.81	163.22	0.33077
46	4	87	2	29.04	4182.18	4182.88	4183.58	30.07	38.35	46.67	0.33462
46	4	87	2	28.83	4205.27	4205.97	4206.67	315.01	323.76	332.53	0.33462
47	4	88	2	28.41	4251.86	4252.57	4253.28	184.14	192.76	201.35	0.32959
47	4	89	2	28.21	4275.39	4276.11	4276.83	97.64	106.03	114.43	0.33333
47	4	90	2	28.00	4299.05	4299.78	4300.50	19.58	27.97	36.22	0.33708
48	4	91	2	27.58	4346.82	4347.55	4348.29	135.68	143.82	152.00	0.33212
48	4	91	2	27.37	4370.93	4371.66	4372.40	35.01	42.62	50.21	0.33212
48	4	92	2	27.16	4395.19	4395.93	4396.67	280.91	288.77	296.65	0.33577
50	4	128	2	23.31	4866.34	4867.37	4868.40	257.99	269.31	280.71	0.49805
50	4	129	2	23.05	4899.97	4901.01	4902.05	247.38	257.82	268.32	0.50195
51	4	132	2	20.74	5208.94	5210.01	5211.07	178.70	189.62	200.49	0.49811
51	4	133	2	20.48	5243.80	5244.88	5245.95	152.00	161.42	170.84	0.50189
54	4	131	2	17.08	5736.83	5737.88	5738.94	303.53	313.52	323.53	0.51172
54	4	125	2	16.86	5769.73	5770.73	5771.74	251.06	260.46	269.85	0.48828
55	4	117	2	14.87	6078.19	6079.14	6080.08	294.88	303.61	312.35	0.49787
55	4	118	2	14.68	6109.21	6110.16	6111.11	225.15	234.27	243.42	0.50213
56	4	124	2	12.72	6428.57	6429.57	6430.57	272.99	282.11	291.23	0.49799
56	4	125	2	12.53	6461.37	6462.37	6463.38	200.74	209.05	217.31	0.50201
57	4	131	2	10.76	6764.38	6765.44	6766.49	161.61	170.54	179.46	0.50000
57	4	131	2	10.56	6798.75	6799.81	6800.86	75.79	83.69	91.55	0.50000
58	4	136	2	8.99	7079.76	7080.86	7081.96	198.31	206.37	214.43	0.50000
58	4	136	2	8.79	7115.64	7116.74	7117.83	100.61	109.41	118.28	0.50000
59	4	141	2	7.21	7407.85	7408.99	7410.13	117.70	125.77	133.86	0.49823
59	4	142	2	7.01	7445.01	7446.15	7447.30	28.87	37.41	45.94	0.50177
60	4	146	2	5.44	7747.67	7748.84	7750.02	107.25	115.09	122.93	0.50000
60	4	146	2	5.24	7785.99	7787.16	7788.34	4.66	12.67	20.67	0.50000
1	5	1	10	142.31	144.42	144.46	144.50	177.61	176.42	175.22	0.03030

1	5	1	10	142.31	144.58	144.62	144.66	172.84	171.64	170.45	0.03030
1	5	1	10	142.30	144.74	144.78	144.82	168.07	166.87	165.68	0.03030
1	5	1	10	142.29	144.90	144.95	144.99	163.30	162.10	160.91	0.03030
1	5	1	12	141.84	153.55	153.60	153.65	270.49	269.09	267.69	0.03030
1	5	1	12	141.83	153.74	153.79	153.84	264.90	263.50	262.10	0.03030
1	5	1	12	141.82	153.94	153.99	154.03	259.30	257.91	256.51	0.03030
1	5	1	12	141.81	154.13	154.18	154.23	253.71	252.32	250.92	0.03030
1	5	1	10	141.35	163.02	163.06	163.10	359.90	358.76	357.62	0.03030
1	5	1	10	141.34	163.18	163.22	163.26	355.34	354.20	353.06	0.03030
1	5	1	10	141.33	163.34	163.38	163.42	350.78	349.65	348.51	0.03030
1	5	1	10	141.32	163.50	163.54	163.58	346.23	345.09	343.96	0.03030
1	5	1	10	141.32	163.66	163.70	163.74	341.68	340.54	339.40	0.03030
1	5	1	10	140.85	172.84	172.88	172.92	85.71	84.60	83.49	0.03030
1	5	1	10	140.84	173.00	173.04	173.08	81.26	80.15	79.04	0.03030
1	5	1	10	140.83	173.16	173.20	173.24	76.82	75.71	74.59	0.03030
1	5	1	10	140.82	173.32	173.36	173.40	72.37	71.26	70.15	0.03030
1	5	1	10	140.81	173.48	173.52	173.56	67.93	66.82	65.71	0.03030
1	5	1	10	140.33	182.95	182.99	183.03	170.22	169.14	168.06	0.03030
1	5	1	10	140.32	183.11	183.15	183.19	165.89	164.80	163.72	0.03030
1	5	1	10	140.31	183.27	183.31	183.35	161.55	160.46	159.38	0.03030
1	5	1	10	140.31	183.43	183.48	183.52	157.21	156.13	155.04	0.03030
1	5	1	10	140.30	183.60	183.64	183.68	152.87	151.79	150.71	0.03030
1	5	1	10	139.81	193.29	193.33	193.37	255.83	254.78	253.72	0.03030
1	5	1	10	139.80	193.45	193.49	193.53	251.61	250.56	249.50	0.03030
1	5	1	10	139.79	193.61	193.65	193.69	247.39	246.34	245.29	0.03030
1	5	1	10	139.78	193.77	193.81	193.85	243.18	242.12	241.07	0.03030
1	5	1	10	139.77	193.93	193.97	194.01	238.96	237.91	236.86	0.03030
1	5	1	10	139.27	204.03	204.07	204.11	339.15	338.13	337.11	0.03030
1	5	1	10	139.26	204.19	204.23	204.27	335.06	334.04	333.02	0.03030
1	5	1	10	139.25	204.35	204.39	204.43	330.98	329.96	328.94	0.03030
1	5	1	10	139.24	204.51	204.55	204.59	326.90	325.88	324.86	0.03030
1	5	1	10	139.24	204.68	204.72	204.76	322.82	321.80	320.78	0.03030

2	5	16	2	135.29	285.60	285.73	285.86	307.91	305.36	302.81	0.12500
2	5	16	2	135.27	286.12	286.25	286.37	297.72	295.17	292.63	0.12500
2	5	3	2	134.91	293.87	293.90	293.92	147.26	146.80	146.34	0.02344
2	5	19	2	134.03	312.53	312.69	312.84	168.02	165.38	162.74	0.14844
2	5	19	2	134.00	313.15	313.30	313.45	157.47	154.83	152.20	0.14844
2	5	19	2	133.97	313.76	313.91	314.06	146.95	144.33	141.71	0.14844
2	5	18	2	133.17	331.07	331.22	331.36	225.38	223.15	220.92	0.14063
2	5	18	2	133.14	331.65	331.80	331.94	216.46	214.24	212.02	0.14063
3	5	23	2	127.93	449.12	449.31	449.50	59.10	57.94	56.78	0.09091
3	5	23	2	127.90	449.87	450.05	450.24	54.47	53.32	52.17	0.09091
3	5	23	2	127.87	450.61	450.79	450.98	49.88	48.74	47.61	0.09091
3	5	21	2	126.93	472.87	473.03	473.20	292.69	291.94	291.19	0.08300
3	5	21	2	126.90	473.54	473.71	473.88	289.71	288.97	288.23	0.08300
3	5	21	2	126.87	474.22	474.39	474.56	286.76	286.04	285.31	0.08300
3	5	21	2	126.84	474.90	475.07	475.24	283.87	283.16	282.44	0.08300
3	5	20	2	125.57	505.56	505.72	505.88	186.77	186.42	186.08	0.07905
3	5	20	2	125.54	506.20	506.36	506.52	185.41	185.07	184.74	0.07905
3	5	20	2	125.52	506.85	507.01	507.17	184.07	183.74	183.41	0.07905
3	5	20	2	125.49	507.49	507.65	507.81	182.75	182.42	182.10	0.07905
3	5	20	2	125.46	508.14	508.30	508.46	181.46	181.14	180.83	0.07905
4	5	23	2	124.07	542.35	542.53	542.72	149.16	149.17	149.18	0.09312
4	5	23	2	124.04	543.09	543.27	543.46	149.21	149.23	149.25	0.09312
4	5	23	2	124.01	543.83	544.02	544.20	149.30	149.33	149.36	0.09312
4	5	23	2	123.98	544.57	544.76	544.94	149.41	149.44	149.48	0.09312
4	5	23	2	123.95	545.32	545.50	545.69	149.54	149.58	149.62	0.09312
4	5	22	2	122.36	585.13	585.31	585.49	204.05	204.50	204.96	0.08907
4	5	22	2	122.33	585.84	586.02	586.20	205.87	206.33	206.79	0.08907
4	5	22	2	122.30	586.55	586.73	586.91	207.72	208.19	208.65	0.08907
4	5	22	2	122.28	587.26	587.44	587.62	209.59	210.07	210.54	0.08907
4	5	22	2	122.25	587.97	588.15	588.33	211.49	211.98	212.46	0.08907
4	5	22	2	122.22	588.68	588.86	589.04	213.43	213.92	214.41	0.08907
8	5	22	2	112.58	850.67	850.84	851.02	197.22	200.06	202.90	0.11828

8	5	22	2	112.56	851.38	851.55	851.73	208.59	211.43	214.28	0.11828
8	5	22	2	112.54	852.09	852.26	852.44	219.97	222.83	225.68	0.11828
8	5	21	2	111.80	873.78	873.95	874.12	219.30	222.20	225.09	0.11290
8	5	21	2	111.78	874.46	874.62	874.79	230.87	233.77	236.67	0.11290
8	5	21	2	111.76	875.13	875.30	875.47	242.46	245.36	248.27	0.11290
8	5	19	2	111.08	895.46	895.62	895.77	239.88	242.65	245.41	0.10215
8	5	19	2	111.06	896.08	896.23	896.38	250.95	253.71	256.48	0.10215
8	5	19	2	111.04	896.69	896.84	896.99	262.03	264.80	267.57	0.10215
9	5	19	2	106.95	969.26	969.42	969.57	17.98	22.03	26.08	0.14394
9	5	19	2	106.90	969.88	970.03	970.18	34.20	38.27	42.34	0.14394
9	5	21	2	105.61	987.70	987.87	988.04	175.46	180.54	185.63	0.15909
9	5	21	2	104.69	1000.08	1000.25	1000.42	202.63	208.10	213.58	0.15909
9	5	15	2	103.87	1011.35	1011.47	1011.59	214.84	218.92	222.99	0.11364
9	5	15	2	103.83	1011.83	1011.95	1012.07	231.15	235.23	239.31	0.11364
9	5	22	2	102.95	1023.81	1023.98	1024.16	282.01	288.19	294.38	0.16667
10	5	19	2	100.56	1056.99	1057.14	1057.29	44.85	50.64	56.43	0.16379
10	5	18	2	99.84	1067.17	1067.32	1067.46	74.82	80.45	86.09	0.15517
10	5	17	2	99.15	1077.01	1077.15	1077.28	102.62	108.10	113.59	0.14655
10	5	16	2	98.40	1087.86	1087.99	1088.12	184.70	190.05	195.40	0.13793
10	5	16	2	97.78	1097.01	1097.14	1097.27	210.02	215.54	221.06	0.13793
10	5	15	2	97.18	1105.93	1106.05	1106.18	237.60	242.94	248.27	0.12931
10	5	15	2	96.59	1114.63	1114.75	1114.87	265.59	271.06	276.53	0.12931
11	5	14	2	94.96	1139.51	1139.62	1139.73	350.25	355.71	1.18	0.13592
11	5	14	2	94.44	1147.45	1147.56	1147.68	18.68	24.26	29.84	0.13592
11	5	13	2	93.94	1155.27	1155.38	1155.48	49.06	54.34	59.63	0.12621
11	5	13	2	93.30	1165.46	1165.57	1165.67	209.16	214.57	219.99	0.12621
11	5	13	2	92.83	1172.88	1172.98	1173.08	235.07	240.58	246.09	0.12621
11	5	12	2	92.38	1180.22	1180.32	1180.42	264.31	269.48	274.66	0.11650
11	5	12	2	91.94	1187.36	1187.45	1187.55	289.24	294.51	299.78	0.11650
11	5	12	2	91.51	1194.34	1194.44	1194.54	312.68	318.03	323.40	0.11650
12	5	10	2	89.38	1229.96	1230.04	1230.12	193.27	197.99	202.71	0.05650
12	5	21	2	89.02	1236.08	1236.25	1236.41	191.70	201.62	211.54	0.11864

12	5	21	2	88.67	1242.06	1242.23	1242.40	181.93	191.84	201.74	0.11864
12	5	10	2	88.32	1248.24	1248.33	1248.41	183.02	187.71	192.41	0.05650
12	5	10	2	87.97	1254.34	1254.42	1254.50	177.27	181.94	186.61	0.05650
12	5	21	2	87.62	1260.44	1260.61	1260.78	169.65	179.42	189.19	0.11864
12	5	21	2	87.28	1266.44	1266.61	1266.78	154.81	164.52	174.25	0.11864
12	5	21	2	86.95	1272.36	1272.53	1272.69	133.94	143.63	153.32	0.11864
12	5	21	2	86.62	1278.21	1278.38	1278.55	108.34	118.00	127.66	0.11864
12	5	21	2	86.30	1284.06	1284.23	1284.40	81.39	91.02	100.65	0.11864
13	5	20	2	84.31	1320.79	1320.95	1321.11	357.61	6.69	15.77	0.09434
13	5	7	2	84.13	1324.28	1324.34	1324.39	194.14	197.32	200.49	0.03302
13	5	22	2	83.79	1330.61	1330.79	1330.97	189.63	199.57	209.51	0.10377
13	5	20	2	83.47	1336.79	1336.95	1337.11	174.86	183.85	192.83	0.09434
13	5	20	2	83.17	1342.50	1342.66	1342.82	131.86	140.77	149.69	0.09434
13	5	20	2	82.88	1348.21	1348.38	1348.54	86.65	95.48	104.31	0.09434
13	5	20	2	82.58	1353.93	1354.09	1354.25	38.13	46.86	55.58	0.09434
13	5	20	2	82.29	1359.70	1359.86	1360.02	348.17	356.78	5.38	0.09434
13	5	21	2	82.00	1365.46	1365.63	1365.80	293.51	302.41	311.30	0.09906
13	5	21	2	81.70	1371.26	1371.43	1371.60	235.55	244.29	253.02	0.09906
13	5	21	2	81.41	1377.09	1377.26	1377.43	174.11	182.70	191.30	0.09906
14	5	12	2	79.61	1413.97	1414.07	1414.16	176.29	180.91	185.53	0.05607
14	5	22	2	79.33	1419.84	1420.02	1420.19	96.26	104.71	113.16	0.10280
14	5	22	2	79.03	1425.96	1426.14	1426.32	27.45	35.88	44.32	0.10280
14	5	22	2	78.74	1432.17	1432.35	1432.52	322.17	330.57	338.97	0.10280
14	5	22	2	78.45	1438.42	1438.60	1438.77	257.62	265.99	274.36	0.10280
14	5	23	2	78.16	1444.69	1444.88	1445.06	192.57	201.26	209.94	0.10748
14	5	22	2	77.86	1451.02	1451.19	1451.37	127.48	135.71	143.94	0.10280
14	5	23	2	77.57	1457.40	1457.59	1457.77	62.46	70.98	79.50	0.10748
14	5	23	2	77.28	1463.88	1464.06	1464.25	358.03	6.44	14.86	0.10748
14	5	23	2	76.98	1470.39	1470.58	1470.76	291.58	299.88	308.18	0.10748
15	5	16	2	74.12	1536.27	1536.40	1536.53	193.55	198.77	203.99	0.15094
15	5	12	2	73.84	1543.18	1543.28	1543.38	113.07	116.97	120.87	0.11321
15	5	13	2	73.53	1550.56	1550.67	1550.77	48.28	52.42	56.57	0.12264

15	5	13	2	73.23	1557.97	1558.08	1558.18	337.80	341.83	345.86	0.12264
15	5	13	2	72.92	1565.47	1565.58	1565.68	261.01	264.89	268.78	0.12264
15	5	13	2	72.61	1573.07	1573.17	1573.28	179.79	183.63	187.47	0.12264
15	5	13	2	72.30	1580.78	1580.88	1580.99	97.17	100.90	104.62	0.12264
15	5	13	2	71.99	1588.58	1588.69	1588.79	12.63	16.29	19.95	0.12264
16	5	14	2	70.65	1623.33	1623.44	1623.55	154.51	158.48	162.45	0.13462
16	5	15	2	70.33	1631.72	1631.84	1631.96	89.06	93.29	97.52	0.14423
16	5	15	2	70.02	1640.24	1640.36	1640.48	25.33	29.49	33.64	0.14423
16	5	15	2	69.70	1648.81	1648.93	1649.05	320.83	325.04	329.24	0.14423
16	5	15	2	69.39	1657.53	1657.65	1657.77	262.81	266.92	271.03	0.14423
16	5	15	2	69.07	1666.22	1666.34	1666.46	185.83	189.75	193.67	0.14423
16	5	15	2	68.76	1675.05	1675.17	1675.29	112.04	115.97	119.90	0.14423
17	5	16	2	67.48	1711.94	1712.06	1712.19	238.79	242.97	247.15	0.13793
17	5	16	2	67.17	1721.31	1721.43	1721.56	180.12	184.21	188.29	0.13793
17	5	16	2	66.86	1730.68	1730.81	1730.93	107.34	111.24	115.12	0.13793
17	5	17	2	66.55	1740.20	1740.34	1740.47	37.48	41.74	46.00	0.14655
17	5	17	2	66.24	1749.72	1749.86	1750.00	330.36	334.43	338.51	0.14655
17	5	17	2	65.93	1759.46	1759.60	1759.74	256.14	260.13	264.11	0.14655
17	5	17	2	65.62	1769.33	1769.47	1769.61	180.35	184.24	188.11	0.14655
18	5	18	2	64.34	1811.74	1811.88	1812.03	319.20	323.28	327.35	0.15929
18	5	18	2	64.04	1822.08	1822.22	1822.37	249.62	253.72	257.83	0.15929
18	5	19	2	63.73	1832.66	1832.81	1832.96	190.81	195.15	199.48	0.16814
18	5	19	2	63.43	1843.40	1843.55	1843.70	133.25	137.52	141.78	0.16814
18	5	19	2	63.13	1854.34	1854.49	1854.64	72.50	76.66	80.82	0.16814
18	5	20	2	62.82	1865.52	1865.68	1865.84	20.74	25.23	29.72	0.17699
22	5	26	2	59.25	2006.62	2006.83	2007.04	192.71	198.24	203.76	0.22034
22	5	23	2	58.93	2020.08	2020.26	2020.45	171.97	176.55	181.13	0.19492
22	5	23	2	58.64	2032.58	2032.76	2032.95	123.22	127.89	132.57	0.19492
22	5	23	2	58.35	2045.08	2045.26	2045.45	82.21	86.92	91.62	0.19492
22	5	23	2	58.07	2057.58	2057.76	2057.95	36.33	41.10	45.87	0.19492
23	5	23	2	57.22	2095.71	2095.90	2096.08	255.04	259.58	264.12	0.19828
23	5	23	2	56.94	2108.48	2108.66	2108.85	196.85	201.14	205.44	0.19828

23	5	23	2	56.65	2121.93	2122.11	2122.30	149.80	154.19	158.57	0.19828
23	5	23	2	56.37	2134.70	2134.88	2135.07	89.02	93.35	97.67	0.19828
23	5	24	2	56.03	2150.71	2150.90	2151.09	98.64	102.94	107.25	0.20690
24	5	25	2	54.39	2231.01	2231.22	2231.42	321.64	325.44	329.24	0.15823
24	5	26	2	54.11	2245.17	2245.38	2245.59	230.23	234.20	238.16	0.16456
24	5	26	2	53.83	2259.46	2259.66	2259.87	135.89	139.83	143.77	0.16456
24	5	27	2	53.54	2274.16	2274.38	2274.60	51.47	55.55	59.65	0.17089
24	5	27	2	53.25	2289.24	2289.45	2289.67	337.20	341.21	345.21	0.17089
24	5	27	2	53.07	2298.60	2298.82	2299.03	148.02	151.97	155.93	0.17089
25	5	29	2	52.39	2334.72	2334.95	2335.19	55.95	60.10	64.22	0.23967
25	5	30	2	52.09	2350.95	2351.19	2351.44	335.00	339.05	343.10	0.24793
25	5	31	2	51.78	2367.53	2367.78	2368.03	245.91	249.89	253.87	0.25620
25	5	31	2	51.47	2384.56	2384.81	2385.06	151.51	155.31	159.12	0.25620
26	5	32	2	50.86	2418.83	2419.09	2419.34	331.24	335.36	339.48	0.24615
26	5	32	2	50.54	2436.58	2436.84	2437.09	255.85	259.98	264.11	0.24615
26	5	33	2	50.24	2454.21	2454.47	2454.74	174.16	178.24	182.32	0.25385
26	5	33	2	49.93	2471.85	2472.12	2472.38	75.95	79.87	83.80	0.25385
30	5	64	2	47.30	2630.97	2631.49	2632.00	57.39	65.58	73.77	0.24521
30	5	65	2	47.03	2648.11	2648.63	2649.16	324.77	332.80	340.82	0.24904
30	5	66	2	46.75	2665.70	2666.24	2666.77	231.08	239.00	246.92	0.25287
30	5	66	2	46.48	2683.24	2683.77	2684.30	127.83	135.48	143.14	0.25287
31	5	69	2	46.09	2708.55	2709.11	2709.67	159.18	168.64	178.13	0.31944
31	5	66	2	45.82	2726.42	2726.95	2727.49	94.36	102.89	111.40	0.30556
31	5	81	2	45.42	2753.32	2753.97	2754.62	158.79	169.24	179.70	0.37500
32	5	63	2	44.68	2803.25	2803.76	2804.27	279.35	288.12	296.89	0.25200
32	5	63	2	44.44	2819.92	2820.43	2820.94	200.02	208.32	216.62	0.25200
32	5	61	2	44.21	2836.09	2836.58	2837.07	108.22	116.41	124.58	0.24400
32	5	63	2	43.97	2852.92	2853.42	2853.93	22.09	30.11	38.11	0.25200
33	5	84	2	43.50	2886.10	2886.77	2887.45	179.05	189.56	200.09	0.34146
33	5	96	2	43.15	2911.01	2911.79	2912.56	210.64	223.20	235.82	0.39024
33	5	66	2	42.89	2929.94	2930.47	2931.00	167.00	175.96	184.90	0.26829
34	5	67	2	42.17	2982.70	2983.24	2983.78	246.51	254.73	263.01	0.26070

34	5	66	2	41.93	3000.65	3001.18	3001.71	175.97	184.87	193.77	0.25681
34	5	65	2	41.70	3018.00	3018.52	3019.05	101.45	109.93	118.43	0.25292
34	5	59	2	41.45	3036.96	3037.43	3037.91	44.38	51.90	59.42	0.22957
35	5	61	2	40.32	3124.15	3124.64	3125.14	299.01	306.23	313.46	0.24597
35	5	62	2	40.11	3140.63	3141.13	3141.63	181.75	189.07	196.39	0.25000
35	5	62	2	39.90	3157.23	3157.73	3158.23	42.02	48.42	54.85	0.25000
35	5	63	2	39.69	3173.91	3174.42	3174.93	271.79	278.76	285.72	0.25403
36	5	64	2	39.28	3207.61	3208.13	3208.65	13.19	20.43	27.68	0.24903
36	5	64	2	39.07	3224.60	3225.12	3225.64	250.25	257.45	264.65	0.24903
36	5	64	2	38.86	3241.72	3242.24	3242.76	128.91	136.05	143.17	0.24903
36	5	65	2	38.65	3258.93	3259.46	3259.98	353.72	0.14	6.54	0.25292
37	5	66	2	38.03	3311.21	3311.75	3312.28	357.89	5.05	12.19	0.24812
37	5	66	2	37.82	3328.86	3329.39	3329.92	232.20	239.27	246.36	0.24812
37	5	67	2	37.61	3346.60	3347.14	3347.68	112.48	119.99	127.50	0.25188
37	5	67	2	37.40	3364.46	3365.00	3365.54	13.38	21.75	30.12	0.25188
38	5	68	2	37.09	3391.15	3391.69	3392.24	66.36	74.82	83.29	0.24818
38	5	68	2	36.88	3409.29	3409.84	3410.39	339.92	347.73	355.52	0.24818
38	5	69	2	36.68	3427.55	3428.10	3428.66	227.88	235.22	242.57	0.25182
38	5	69	2	36.47	3445.92	3446.47	3447.03	110.80	118.04	125.28	0.25182
39	5	70	2	36.05	3482.96	3483.53	3484.09	258.02	266.29	274.58	0.24823
39	5	70	2	35.86	3500.01	3500.58	3501.14	154.09	162.72	171.34	0.24823
39	5	71	2	35.66	3518.83	3519.40	3519.97	70.43	78.31	86.14	0.25177
39	5	71	2	35.40	3541.89	3542.46	3543.03	5.55	12.54	19.56	0.25177
40	5	73	2	34.99	3580.16	3580.75	3581.34	142.81	150.37	157.94	0.24915
40	5	73	2	34.78	3599.48	3600.06	3600.65	49.50	58.19	66.89	0.24915
40	5	73	2	34.57	3618.93	3619.51	3620.10	338.09	346.38	354.66	0.24915
40	5	74	2	34.36	3638.49	3639.09	3639.68	265.28	274.10	282.93	0.25256
41	5	75	2	33.99	3673.88	3674.49	3675.09	52.62	61.23	69.77	0.24917
41	5	75	2	33.78	3693.80	3694.40	3695.01	326.62	335.20	343.77	0.24917
41	5	75	2	33.57	3713.82	3714.43	3715.03	250.33	258.80	267.25	0.24917
41	5	76	2	33.37	3733.17	3733.78	3734.39	161.13	169.90	178.68	0.25249
42	5	78	2	32.54	3815.05	3815.68	3816.31	171.45	178.30	185.16	0.33051

42	5	79	2	32.33	3835.84	3836.47	3837.11	70.27	78.55	86.78	0.33475
42	5	79	2	32.13	3856.76	3857.40	3858.04	337.48	345.59	353.68	0.33475
43	5	80	2	31.71	3898.99	3899.63	3900.28	70.16	76.85	83.65	0.33058
43	5	81	2	31.50	3920.29	3920.95	3921.60	339.58	350.17	0.85	0.33471
43	5	81	2	31.29	3941.74	3942.39	3943.05	295.95	304.62	313.28	0.33471
44	5	82	2	30.88	3985.03	3985.69	3986.35	215.26	225.46	235.77	0.33065
44	5	83	2	30.68	4005.36	4006.03	4006.70	203.08	214.94	226.71	0.33468
44	5	83	2	30.47	4027.34	4028.01	4028.68	213.27	223.87	234.43	0.33468
45	5	84	2	30.06	4071.71	4072.38	4073.06	132.51	141.75	150.99	0.33071
45	5	85	2	29.85	4094.08	4094.76	4095.45	81.94	91.30	100.63	0.33465
45	5	85	2	29.64	4116.61	4117.29	4117.98	22.69	31.60	40.47	0.33465
46	5	86	2	29.22	4162.10	4162.79	4163.48	176.73	183.19	189.66	0.33077
46	5	87	2	29.02	4185.04	4185.74	4186.44	64.01	72.36	80.72	0.33462
46	5	87	2	28.81	4208.14	4208.85	4209.55	351.01	359.84	8.67	0.33462
47	5	89	2	28.39	4254.77	4255.49	4256.21	219.33	227.93	236.49	0.33209
47	5	89	2	28.18	4278.33	4279.04	4279.76	132.08	140.50	148.96	0.33209
47	5	90	2	27.97	4302.00	4302.73	4303.45	52.87	60.72	68.42	0.33582
48	5	91	2	27.55	4349.81	4350.54	4351.28	168.97	177.17	185.35	0.33212
48	5	91	2	27.34	4373.94	4374.67	4375.40	66.06	73.56	81.06	0.33212
48	5	92	2	27.13	4398.22	4398.96	4399.70	313.14	321.09	329.07	0.33577
50	5	128	2	23.28	4870.54	4871.57	4872.60	304.49	316.03	327.57	0.49805
50	5	129	2	23.02	4904.19	4905.23	4906.27	290.02	300.62	311.26	0.50195
51	5	132	2	20.71	5213.27	5214.33	5215.39	222.71	233.43	244.12	0.49811
51	5	133	2	20.45	5248.14	5249.21	5250.29	190.03	199.43	208.84	0.50189
54	5	131	2	17.05	5741.12	5742.17	5743.23	344.12	354.10	4.09	0.51172
54	5	125	2	16.83	5773.81	5774.82	5775.82	289.05	298.43	307.81	0.48828
55	5	118	2	14.85	6082.04	6082.99	6083.94	330.58	339.46	348.33	0.50000
55	5	118	2	14.65	6113.06	6114.01	6114.96	262.35	271.65	280.98	0.50000
56	5	124	2	12.70	6432.64	6433.64	6434.64	310.05	319.09	328.13	0.49799
56	5	125	2	12.50	6465.46	6466.47	6467.48	234.10	242.13	250.09	0.50201
57	5	131	2	10.73	6768.66	6769.72	6770.78	197.68	206.47	215.23	0.50000
57	5	131	2	10.54	6803.04	6804.10	6805.15	107.57	115.29	122.99	0.50000

58	5	136	2	8.96	7084.20	7085.29	7086.39	230.80	238.80	246.79	0.50000
58	5	136	2	8.76	7120.10	7121.20	7122.29	136.77	145.77	154.79	0.50000
59	5	141	2	7.19	7412.48	7413.61	7414.75	150.51	158.60	166.67	0.49823
59	5	142	2	6.99	7449.64	7450.79	7451.93	63.35	71.85	80.42	0.50177
60	5	146	2	5.41	7752.43	7753.61	7754.79	138.93	146.71	154.49	0.50000
60	5	146	2	5.22	7790.77	7791.94	7793.12	37.07	44.99	52.89	0.50000
1	6	1	10	142.26	145.54	145.58	145.62	144.48	143.29	142.10	0.03030
1	6	1	10	142.25	145.70	145.74	145.78	139.72	138.53	137.34	0.03030
1	6	1	10	142.24	145.86	145.90	145.95	134.96	133.78	132.59	0.03030
1	6	1	10	142.23	146.03	146.07	146.11	130.21	129.02	127.83	0.03030
1	6	1	12	141.78	154.70	154.75	154.80	237.19	235.79	234.40	0.03030
1	6	1	12	141.77	154.90	154.94	154.99	231.61	230.21	228.82	0.03030
1	6	1	12	141.76	155.09	155.14	155.19	226.03	224.64	223.24	0.03030
1	6	1	12	141.75	155.28	155.33	155.38	220.46	219.06	217.67	0.03030
1	6	1	10	141.29	164.21	164.25	164.29	326.22	325.08	323.94	0.03030
1	6	1	10	141.28	164.37	164.41	164.45	321.67	320.54	319.40	0.03030
1	6	1	10	141.27	164.53	164.57	164.61	317.13	316.00	314.86	0.03030
1	6	1	10	141.26	164.69	164.73	164.77	312.59	311.46	310.32	0.03030
1	6	1	10	141.26	164.86	164.90	164.94	308.06	306.92	305.79	0.03030
1	6	1	10	140.78	174.07	174.11	174.15	51.72	50.62	49.51	0.03030
1	6	1	10	140.77	174.23	174.27	174.31	47.29	46.18	45.07	0.03030
1	6	1	10	140.77	174.39	174.44	174.48	42.86	41.75	40.64	0.03030
1	6	1	10	140.76	174.56	174.60	174.64	38.43	37.32	36.21	0.03030
1	6	1	10	140.75	174.72	174.76	174.80	34.00	32.89	31.79	0.03030
1	6	1	10	140.26	184.22	184.27	184.31	135.98	134.90	133.82	0.03030
1	6	1	10	140.26	184.39	184.43	184.47	131.66	130.58	129.50	0.03030
1	6	1	10	140.25	184.55	184.59	184.63	127.34	126.26	125.18	0.03030
1	6	1	10	140.24	184.71	184.75	184.79	123.01	121.93	120.86	0.03030
1	6	1	10	140.23	184.87	184.91	184.95	118.70	117.62	116.54	0.03030
1	6	1	10	139.74	194.58	194.62	194.66	222.13	221.07	220.02	0.03030
1	6	1	10	139.73	194.74	194.78	194.82	217.92	216.87	215.82	0.03030

1	6	1	10	139.73	194.90	194.94	194.98	213.72	212.67	211.62	0.03030
1	6	1	10	139.72	195.06	195.10	195.14	209.52	208.47	207.42	0.03030
1	6	1	10	139.71	195.22	195.26	195.30	205.32	204.27	203.22	0.03030
1	6	1	10	139.20	205.38	205.42	205.46	305.11	304.09	303.07	0.03030
1	6	1	10	139.19	205.54	205.58	205.62	301.04	300.02	299.01	0.03030
1	6	1	10	139.18	205.70	205.74	205.78	296.97	295.96	294.94	0.03030
1	6	1	10	139.18	205.86	205.90	205.94	292.91	291.90	290.88	0.03030
1	6	1	10	139.17	206.02	206.06	206.10	288.85	287.84	286.82	0.03030
2	6	16	2	135.21	287.26	287.39	287.52	275.18	272.65	270.12	0.09412
2	6	16	2	135.19	287.78	287.91	288.04	265.06	262.53	260.00	0.09412
2	6	21	2	134.88	294.21	294.38	294.55	140.81	137.59	134.37	0.12353
2	6	21	2	134.85	294.89	295.06	295.23	127.94	124.73	121.52	0.12353
2	6	20	2	133.90	315.19	315.35	315.51	122.58	119.84	117.10	0.11765
2	6	20	2	133.87	315.83	315.99	316.15	111.63	108.89	106.17	0.11765
2	6	20	2	133.84	316.48	316.64	316.80	100.72	98.00	95.28	0.11765
2	6	18	2	133.08	332.99	333.14	333.28	196.04	193.83	191.63	0.10588
2	6	18	2	133.05	333.57	333.72	333.86	187.23	185.04	182.84	0.10588
3	6	23	2	127.80	452.25	452.44	452.62	39.87	38.76	37.64	0.09237
3	6	23	2	127.77	453.00	453.18	453.37	35.43	34.32	33.22	0.09237
3	6	23	2	127.74	453.74	453.92	454.11	31.03	29.94	28.85	0.09237
3	6	21	2	126.78	476.43	476.60	476.77	277.47	276.77	276.07	0.08434
3	6	21	2	126.75	477.11	477.28	477.45	274.68	273.99	273.29	0.08434
3	6	21	2	126.72	477.78	477.95	478.12	271.92	271.23	270.55	0.08434
3	6	21	2	126.69	478.46	478.63	478.80	269.19	268.51	267.84	0.08434
3	6	24	2	125.39	509.77	509.97	510.16	178.33	177.97	177.62	0.09639
3	6	24	2	125.36	510.55	510.74	510.94	176.91	176.56	176.21	0.09639
3	6	24	2	125.33	511.32	511.52	511.71	175.53	175.19	174.85	0.09639
3	6	24	2	125.30	512.10	512.29	512.48	174.18	173.85	173.52	0.09639
4	6	23	2	123.88	547.03	547.22	547.40	149.97	150.03	150.09	0.09312
4	6	23	2	123.85	547.77	547.96	548.15	150.22	150.29	150.35	0.09312
4	6	23	2	123.82	548.52	548.70	548.89	150.50	150.57	150.65	0.09312
4	6	23	2	123.79	549.26	549.44	549.63	150.81	150.90	150.98	0.09312

4	6	23	2	123.76	550.00	550.19	550.37	151.16	151.25	151.34	0.09312
4	6	22	2	122.15	590.49	590.66	590.84	218.51	219.01	219.53	0.08907
4	6	22	2	122.12	591.20	591.37	591.55	220.55	221.07	221.59	0.08907
4	6	22	2	122.09	591.91	592.08	592.26	222.64	223.16	223.69	0.08907
4	6	22	2	122.07	592.62	592.79	592.97	224.74	225.27	225.80	0.08907
4	6	22	2	122.04	593.33	593.50	593.68	226.87	227.41	227.95	0.08907
4	6	22	2	122.01	594.04	594.21	594.39	229.03	229.58	230.13	0.08907
8	6	22	2	112.48	853.73	853.91	854.09	246.47	249.33	252.20	0.11828
8	6	22	2	112.46	854.44	854.62	854.80	257.93	260.80	263.68	0.11828
8	6	22	2	112.43	855.15	855.33	855.51	269.42	272.30	275.18	0.11828
8	6	21	2	111.70	876.67	876.83	877.00	268.75	271.66	274.58	0.11290
8	6	21	2	111.68	877.34	877.51	877.68	280.41	283.33	286.25	0.11290
8	6	21	2	111.66	878.02	878.19	878.36	292.09	295.01	297.93	0.11290
8	6	19	2	110.99	898.14	898.29	898.45	288.34	291.12	293.90	0.10215
8	6	19	2	110.97	898.75	898.91	899.06	299.48	302.26	305.05	0.10215
8	6	19	2	110.95	899.37	899.52	899.67	310.63	313.42	316.21	0.10215
9	6	19	2	106.80	971.29	971.45	971.60	72.05	76.16	80.27	0.12925
9	6	19	2	106.76	971.91	972.06	972.21	88.52	92.64	96.77	0.12925
9	6	15	2	106.22	979.34	979.46	979.58	292.94	296.34	299.75	0.10204
9	6	21	2	105.50	989.17	989.34	989.51	219.71	224.86	230.00	0.14286
9	6	21	2	104.58	1001.57	1001.74	1001.91	251.01	256.52	262.04	0.14286
9	6	15	2	103.75	1012.99	1013.11	1013.23	270.12	274.21	278.31	0.10204
9	6	15	2	103.71	1013.47	1013.59	1013.71	286.51	290.61	294.72	0.10204
9	6	22	2	102.84	1025.34	1025.52	1025.69	335.48	341.69	347.90	0.14966
10	6	19	2	100.47	1058.30	1058.45	1058.61	94.55	100.36	106.17	0.16239
10	6	18	2	99.75	1068.44	1068.58	1068.73	124.06	129.72	135.38	0.15385
10	6	17	2	99.07	1078.23	1078.37	1078.51	151.74	157.24	162.76	0.14530
10	6	17	2	98.33	1089.02	1089.15	1089.29	232.63	238.34	244.06	0.14530
10	6	16	2	97.70	1098.14	1098.27	1098.40	258.76	264.30	269.84	0.13675
10	6	15	2	97.10	1107.04	1107.16	1107.28	286.34	291.69	297.04	0.12821
10	6	15	2	96.52	1115.71	1115.83	1115.95	314.51	319.99	325.48	0.12821
11	6	14	2	94.89	1140.51	1140.62	1140.73	38.70	44.18	49.66	0.13462

11	6	14	2	94.38	1148.44	1148.55	1148.67	67.75	73.34	78.93	0.13462
11	6	13	2	93.88	1156.25	1156.35	1156.46	98.31	103.62	108.92	0.12500
11	6	13	2	93.24	1166.41	1166.51	1166.62	257.93	263.36	268.79	0.12500
11	6	13	2	92.78	1173.79	1173.90	1174.00	283.41	288.93	294.45	0.12500
11	6	13	2	92.32	1181.12	1181.22	1181.33	312.21	317.84	323.46	0.12500
11	6	12	2	91.88	1188.25	1188.34	1188.44	337.59	342.87	348.14	0.11538
11	6	12	2	91.46	1195.21	1195.31	1195.41	0.96	6.33	11.70	0.11538
12	6	10	2	89.34	1230.73	1230.81	1230.89	238.58	243.31	248.02	0.06024
12	6	10	2	88.99	1236.75	1236.83	1236.91	230.90	235.63	240.35	0.06024
12	6	21	2	88.63	1242.81	1242.98	1243.15	225.77	235.68	245.57	0.12651
12	6	10	2	88.28	1249.02	1249.10	1249.18	228.09	232.78	237.47	0.06024
12	6	10	2	87.93	1255.11	1255.19	1255.27	221.64	226.31	230.98	0.06024
12	6	21	2	87.58	1261.19	1261.36	1261.53	212.89	222.65	232.41	0.12651
12	6	21	2	87.24	1267.19	1267.36	1267.53	197.84	207.55	217.28	0.12651
12	6	21	2	86.91	1273.10	1273.27	1273.44	176.38	186.06	195.75	0.12651
12	6	21	2	86.58	1278.94	1279.11	1279.28	150.19	159.86	169.51	0.12651
12	6	21	2	86.26	1284.78	1284.95	1285.12	122.67	132.30	141.92	0.12651
13	6	20	2	84.27	1321.50	1321.66	1321.82	37.57	46.64	55.72	0.08889
13	6	20	2	84.10	1324.68	1324.84	1325.00	216.37	225.44	234.51	0.08889
13	6	22	2	83.75	1331.39	1331.57	1331.75	233.46	243.40	253.33	0.09778
13	6	20	2	83.43	1337.50	1337.66	1337.82	214.40	223.37	232.34	0.08889
13	6	20	2	83.13	1343.22	1343.38	1343.54	171.54	180.45	189.36	0.08889
13	6	20	2	82.84	1348.93	1349.09	1349.26	125.95	134.76	143.59	0.08889
13	6	20	2	82.55	1354.64	1354.80	1354.96	76.52	85.23	93.94	0.08889
13	6	21	2	82.25	1360.42	1360.58	1360.75	26.44	35.47	44.49	0.09333
13	6	20	2	81.96	1366.19	1366.35	1366.51	331.59	340.04	348.49	0.08889
13	6	21	2	81.67	1372.00	1372.17	1372.33	273.38	282.10	290.82	0.09333
13	6	21	2	81.38	1377.82	1377.99	1378.16	210.91	219.49	228.07	0.09333
14	6	12	2	79.57	1414.89	1414.99	1415.08	220.19	224.80	229.42	0.05607
14	6	22	2	79.29	1420.61	1420.78	1420.96	132.75	141.19	149.64	0.10280
14	6	22	2	79.00	1426.73	1426.90	1427.08	63.86	72.28	80.71	0.10280
14	6	22	2	78.71	1432.94	1433.12	1433.30	358.82	7.22	15.62	0.10280

14	6	22	2	78.41	1439.20	1439.38	1439.56	294.51	302.87	311.23	0.10280
14	6	23	2	78.12	1445.48	1445.67	1445.85	229.56	238.24	246.91	0.10748
14	6	22	2	77.83	1451.81	1451.98	1452.16	164.15	172.37	180.59	0.10280
14	6	23	2	77.53	1458.20	1458.39	1458.57	99.10	107.61	116.11	0.10748
14	6	23	2	77.24	1464.68	1464.87	1465.05	34.58	42.99	51.38	0.10748
14	6	23	2	76.94	1471.21	1471.39	1471.58	328.00	336.29	344.57	0.10748
15	6	16	2	74.08	1537.39	1537.52	1537.65	238.89	244.11	249.32	0.14953
15	6	13	2	73.80	1544.08	1544.18	1544.29	149.15	153.38	157.61	0.12150
15	6	13	2	73.49	1551.49	1551.59	1551.70	84.90	89.03	93.16	0.12150
15	6	13	2	73.19	1558.90	1559.01	1559.11	13.38	17.39	21.40	0.12150
15	6	13	2	72.88	1566.42	1566.52	1566.63	295.94	299.82	303.70	0.12150
15	6	13	2	72.58	1574.02	1574.13	1574.23	214.62	218.44	222.26	0.12150
15	6	13	2	72.27	1581.74	1581.84	1581.95	131.21	134.93	138.64	0.12150
15	6	13	2	71.96	1589.56	1589.66	1589.77	46.64	50.29	53.94	0.12150
16	6	15	2	70.61	1624.35	1624.47	1624.59	190.52	194.78	199.03	0.14286
16	6	15	2	70.29	1632.78	1632.90	1633.02	126.04	130.28	134.52	0.14286
16	6	15	2	69.98	1641.31	1641.43	1641.55	62.12	66.27	70.41	0.14286
16	6	15	2	69.66	1649.88	1650.00	1650.12	358.16	2.38	6.60	0.14286
16	6	15	2	69.35	1658.61	1658.73	1658.85	299.15	303.17	307.19	0.14286
16	6	15	2	69.04	1667.31	1667.43	1667.55	221.10	225.02	228.94	0.14286
16	6	15	2	68.72	1676.15	1676.27	1676.40	147.95	151.88	155.82	0.14286
17	6	17	2	67.44	1713.08	1713.22	1713.35	275.93	280.37	284.82	0.14407
17	6	16	2	67.13	1722.48	1722.60	1722.73	217.07	221.13	225.18	0.13559
17	6	17	2	66.82	1731.83	1731.97	1732.10	142.12	146.26	150.39	0.14407
17	6	17	2	66.51	1741.39	1741.52	1741.66	74.31	78.57	82.84	0.14407
17	6	17	2	66.20	1750.91	1751.05	1751.18	5.56	9.62	13.67	0.14407
17	6	17	2	65.89	1760.67	1760.81	1760.95	291.28	295.25	299.23	0.14407
17	6	17	2	65.58	1770.56	1770.70	1770.83	215.03	218.91	222.79	0.14407
18	6	18	2	64.61	1802.68	1802.83	1802.97	61.22	65.32	69.44	0.16216
18	6	18	2	64.30	1813.03	1813.17	1813.32	355.40	359.47	3.53	0.16216
18	6	18	2	64.00	1823.37	1823.52	1823.66	286.41	290.53	294.65	0.16216
18	6	19	2	63.70	1833.97	1834.12	1834.28	227.99	232.32	236.65	0.17117

18	6	19	2	63.39	1844.74	1844.89	1845.04	170.47	174.72	178.97	0.17117
18	6	19	2	63.09	1855.70	1855.85	1856.01	109.59	113.78	117.96	0.17117
22	6	26	2	59.21	2008.39	2008.60	2008.80	239.13	244.59	250.04	0.22034
22	6	23	2	58.90	2021.64	2021.83	2022.01	210.60	215.18	219.75	0.19492
22	6	23	2	58.61	2034.14	2034.33	2034.51	162.71	167.40	172.08	0.19492
22	6	23	2	58.32	2046.64	2046.83	2047.01	121.67	126.30	130.93	0.19492
22	6	23	2	58.03	2059.14	2059.33	2059.51	76.42	81.17	85.91	0.19492
23	6	23	2	57.18	2097.31	2097.49	2097.68	293.80	298.27	302.72	0.19828
23	6	23	2	56.90	2110.07	2110.26	2110.44	233.82	238.13	242.43	0.19828
23	6	23	2	56.61	2123.52	2123.71	2123.89	187.58	191.97	196.37	0.19828
23	6	23	2	56.34	2136.30	2136.48	2136.67	126.23	130.56	134.88	0.19828
23	6	24	2	56.00	2152.33	2152.53	2152.72	134.67	138.93	143.17	0.20690
24	6	25	2	54.35	2232.76	2232.97	2233.17	354.73	358.55	2.37	0.15723
24	6	26	2	54.07	2246.96	2247.17	2247.38	263.81	267.75	271.68	0.16352
24	6	26	2	53.79	2261.25	2261.46	2261.66	169.51	173.45	177.40	0.16352
24	6	27	2	53.50	2275.99	2276.21	2276.43	85.94	90.05	94.19	0.16981
24	6	27	2	53.21	2291.11	2291.33	2291.55	11.70	15.69	19.67	0.16981
24	6	28	2	53.04	2300.45	2300.68	2300.90	181.66	185.73	189.81	0.17610
25	6	29	2	52.65	2320.91	2321.14	2321.37	175.07	179.01	182.96	0.24370
25	6	29	2	52.35	2336.70	2336.93	2337.16	90.75	94.83	98.91	0.24370
25	6	30	2	52.05	2352.98	2353.22	2353.46	8.79	12.82	16.84	0.25210
25	6	31	2	51.74	2369.61	2369.86	2370.11	279.01	282.97	286.94	0.26050
26	6	32	2	50.82	2420.97	2421.23	2421.49	5.52	9.65	13.77	0.24615
26	6	33	2	50.51	2438.76	2439.03	2439.30	290.82	295.09	299.34	0.25385
26	6	32	2	50.20	2456.43	2456.69	2456.95	208.17	212.10	216.02	0.24615
26	6	33	2	49.89	2474.06	2474.33	2474.59	108.74	112.71	116.67	0.25385
30	6	64	2	47.54	2615.97	2616.49	2617.01	180.96	188.92	196.88	0.28194
30	6	65	2	47.26	2633.11	2633.63	2634.16	91.22	99.47	107.71	0.28634
30	6	65	2	47.00	2650.25	2650.78	2651.30	357.57	5.58	13.57	0.28634
30	6	33	2	46.73	2667.63	2667.90	2668.16	259.74	263.69	267.64	0.14537
31	6	69	2	46.06	2710.83	2711.38	2711.94	197.91	207.39	216.87	0.31797
31	6	67	2	45.79	2728.62	2729.16	2729.70	129.53	138.12	146.69	0.30876

31	6	81	2	45.38	2755.98	2756.63	2757.28	201.44	211.95	222.48	0.37327
32	6	63	2	44.65	2805.33	2805.84	2806.35	315.31	324.10	332.87	0.25200
32	6	63	2	44.41	2822.00	2822.51	2823.02	234.03	242.37	250.73	0.25200
32	6	61	2	44.18	2838.11	2838.60	2839.10	141.89	150.07	158.24	0.24400
32	6	63	2	43.94	2855.01	2855.51	2856.02	55.01	62.99	70.97	0.25200
33	6	84	2	43.46	2888.88	2889.56	2890.23	222.26	232.78	243.32	0.33871
33	6	97	2	43.10	2914.18	2914.96	2915.74	262.22	275.11	288.07	0.39113
33	6	67	2	42.86	2932.14	2932.68	2933.22	203.93	212.90	221.84	0.27016
34	6	66	2	42.14	2984.91	2985.45	2985.98	280.47	288.78	297.11	0.25681
34	6	67	2	41.90	3002.85	3003.39	3003.93	212.74	221.73	230.71	0.26070
34	6	64	2	41.67	3020.15	3020.66	3021.18	136.15	144.49	152.83	0.24903
34	6	60	2	41.42	3038.93	3039.42	3039.90	75.62	83.27	90.93	0.23346
35	6	62	2	40.29	3126.19	3126.69	3127.19	328.99	336.32	343.66	0.24900
35	6	62	2	40.08	3142.70	3143.20	3143.70	211.81	218.99	226.12	0.24900
35	6	62	2	39.88	3159.30	3159.80	3160.30	68.85	75.44	82.08	0.24900
35	6	63	2	39.67	3176.00	3176.50	3177.01	300.29	307.22	314.15	0.25301
36	6	64	2	39.25	3209.73	3210.24	3210.76	42.86	50.09	57.33	0.24903
36	6	64	2	39.04	3226.73	3227.24	3227.76	279.87	287.08	294.32	0.24903
36	6	64	2	38.83	3243.86	3244.38	3244.89	158.40	165.49	172.57	0.24903
36	6	65	2	38.62	3261.08	3261.60	3262.13	19.95	26.35	32.76	0.25292
37	6	65	2	38.21	3295.89	3296.42	3296.94	137.09	145.10	153.11	0.24621
37	6	66	2	38.00	3313.41	3313.94	3314.47	27.30	34.40	41.51	0.25000
37	6	66	2	37.79	3331.06	3331.59	3332.12	261.52	268.64	275.75	0.25000
37	6	67	2	37.58	3348.82	3349.36	3349.90	143.35	150.90	158.46	0.25379
38	6	68	2	37.07	3393.40	3393.94	3394.49	101.15	109.66	118.16	0.24818
38	6	68	2	36.86	3411.56	3412.10	3412.65	12.07	19.79	27.48	0.24818
38	6	69	2	36.65	3429.82	3430.38	3430.93	257.94	265.32	272.71	0.25182
38	6	69	2	36.44	3448.21	3448.76	3449.32	140.53	147.73	154.93	0.25182
39	6	70	2	36.03	3485.29	3485.85	3486.42	292.21	300.60	308.98	0.24648
39	6	71	2	35.84	3502.34	3502.91	3503.49	189.68	198.38	207.08	0.25000
39	6	71	2	35.63	3521.17	3521.74	3522.32	102.43	110.12	117.78	0.25000
39	6	72	2	35.38	3544.25	3544.83	3545.41	34.52	41.73	48.96	0.25352

40	6	72	2	34.96	3582.57	3583.15	3583.73	173.73	181.24	188.77	0.24658
40	6	73	2	34.75	3601.89	3602.48	3603.06	85.12	93.91	102.73	0.25000
40	6	73	2	34.55	3621.35	3621.94	3622.53	12.29	20.60	28.95	0.25000
40	6	74	2	34.34	3640.93	3641.53	3642.13	301.40	310.22	319.03	0.25342
41	6	74	2	34.17	3656.60	3657.20	3657.79	165.90	174.13	182.37	0.24667
41	6	75	2	33.96	3676.35	3676.95	3677.56	87.40	95.77	104.08	0.25000
41	6	75	2	33.76	3696.28	3696.89	3697.49	1.89	10.50	19.11	0.25000
41	6	76	2	33.55	3716.31	3716.93	3717.54	285.14	293.65	302.15	0.25333
42	6	77	2	32.72	3796.99	3797.61	3798.24	319.41	327.28	335.14	0.32906
42	6	78	2	32.52	3817.62	3818.25	3818.88	199.61	206.58	213.62	0.33333
42	6	79	2	32.31	3838.43	3839.07	3839.71	103.75	111.93	120.09	0.33761
43	6	80	2	31.68	3901.63	3902.28	3902.92	98.15	105.17	112.26	0.33195
43	6	80	2	31.48	3922.95	3923.60	3924.24	22.94	33.39	43.71	0.33195
43	6	81	2	31.27	3944.42	3945.07	3945.73	331.30	339.91	348.48	0.33610
44	6	82	2	30.85	3987.74	3988.40	3989.06	257.86	268.58	279.42	0.33198
44	6	82	2	30.66	4008.09	4008.75	4009.41	251.02	262.55	274.05	0.33198
44	6	83	2	30.45	4030.08	4030.75	4031.42	256.50	266.99	277.44	0.33603
45	6	84	2	30.03	4074.48	4075.16	4075.84	170.33	179.59	188.87	0.33071
45	6	85	2	29.82	4096.87	4097.55	4098.24	119.89	129.17	138.42	0.33465
45	6	85	2	29.62	4119.41	4120.10	4120.78	58.95	67.73	76.49	0.33465
46	6	86	2	29.20	4164.94	4165.64	4166.33	203.38	209.97	216.61	0.33077
46	6	87	2	28.99	4187.90	4188.60	4189.31	98.26	106.79	115.36	0.33462
46	6	87	2	28.78	4211.02	4211.72	4212.43	27.33	36.24	45.16	0.33462
47	6	89	2	28.36	4257.69	4258.41	4259.13	254.08	262.51	270.90	0.33209
47	6	89	2	28.15	4281.26	4281.98	4282.70	166.64	175.11	183.57	0.33209
47	6	90	2	27.94	4304.95	4305.68	4306.40	83.86	91.09	98.23	0.33582
48	6	91	2	27.53	4352.79	4353.53	4354.26	202.23	210.34	218.44	0.33212
48	6	91	2	27.32	4376.94	4377.68	4378.41	96.67	104.06	111.42	0.33212
48	6	92	2	27.11	4401.24	4401.98	4402.73	345.65	353.66	1.66	0.33577
50	6	128	2	23.24	4874.74	4875.77	4876.81	351.40	2.85	14.21	0.49805
50	6	129	2	22.98	4908.40	4909.44	4910.48	333.07	343.72	354.38	0.50195
51	6	132	2	20.67	5217.59	5218.65	5219.72	265.96	276.50	287.01	0.49811

51	6	133	2	20.42	5252.49	5253.56	5254.63	228.20	237.66	247.14	0.50189
54	6	131	2	17.02	5745.41	5746.46	5747.52	24.63	34.60	44.54	0.51172
54	6	125	2	16.80	5777.89	5778.90	5779.90	327.06	336.47	345.88	0.48828
55	6	117	2	14.82	6085.89	6086.84	6087.78	6.60	15.44	24.29	0.49787
55	6	118	2	14.63	6116.92	6117.88	6118.83	300.30	309.73	319.17	0.50213
56	6	124	2	12.67	6436.71	6437.71	6438.71	346.77	355.74	4.67	0.49799
56	6	125	2	12.48	6469.56	6470.57	6471.57	266.25	273.97	281.62	0.50201
57	6	130	2	10.90	6738.68	6739.73	6740.78	309.27	317.71	326.18	0.49808
57	6	131	2	10.71	6772.95	6774.00	6775.06	233.10	241.68	250.26	0.50192
58	6	136	2	8.94	7088.64	7089.74	7090.83	262.99	270.83	278.65	0.50000
58	6	136	2	8.74	7124.56	7125.65	7126.75	173.53	182.56	191.60	0.50000
59	6	141	2	7.16	7417.09	7418.23	7419.36	183.33	191.45	199.58	0.49823
59	6	142	2	6.97	7454.28	7455.42	7456.57	97.99	106.59	115.19	0.50177
60	6	146	2	5.39	7757.20	7758.37	7759.55	170.42	178.23	186.02	0.50000
60	6	146	2	5.19	7795.54	7796.72	7797.90	69.03	76.84	84.61	0.50000
1	7	1	10	142.17	147.11	147.15	147.19	98.39	97.21	96.02	0.07143
1	7	1	10	142.17	147.27	147.31	147.35	93.65	92.47	91.28	0.07143
1	7	1	10	141.69	156.38	156.42	156.46	188.92	187.76	186.60	0.07143
1	7	1	10	141.68	156.54	156.58	156.62	184.29	183.13	181.97	0.07143
1	7	1	10	141.20	165.96	166.00	166.04	277.03	275.90	274.77	0.07143
1	7	1	10	141.19	166.12	166.16	166.20	272.50	271.37	270.24	0.07143
1	7	1	10	140.69	175.86	175.90	175.94	2.61	1.51	0.40	0.07143
1	7	1	10	140.68	176.02	176.06	176.10	358.20	357.09	355.99	0.07143
1	7	1	12	140.17	186.03	186.08	186.13	87.65	86.36	85.07	0.07143
1	7	1	12	140.16	186.22	186.27	186.32	82.49	81.20	79.91	0.07143
1	7	1	12	139.65	196.41	196.46	196.51	174.52	173.26	172.01	0.07143
1	7	1	12	139.64	196.60	196.65	196.70	169.50	168.25	166.99	0.07143
1	7	1	12	139.11	207.26	207.30	207.35	257.86	256.64	255.43	0.07143
1	7	1	12	139.10	207.45	207.50	207.55	253.01	251.79	250.58	0.07143
2	7	13	2	135.10	289.65	289.75	289.86	228.54	226.51	224.47	0.19403
2	7	17	2	134.74	297.37	297.51	297.65	81.12	78.55	75.98	0.25373

2	7	22	2	133.72	319.19	319.36	319.54	55.39	52.45	49.51	0.32836
2	7	15	2	132.96	335.72	335.85	335.97	154.90	153.10	151.30	0.22388
3	7	16	2	127.61	456.74	456.87	457.00	13.70	12.97	12.24	0.14035
3	7	16	2	127.59	457.25	457.38	457.51	10.79	10.07	9.35	0.14035
3	7	19	2	126.56	481.59	481.74	481.90	257.06	256.48	255.91	0.16667
3	7	19	2	126.54	482.20	482.36	482.51	254.77	254.20	253.64	0.16667
3	7	22	2	125.15	515.75	515.93	516.10	168.28	168.01	167.75	0.19298
3	7	22	2	125.12	516.46	516.64	516.81	167.23	166.98	166.73	0.19298
4	7	19	2	123.61	553.76	553.91	554.06	153.36	153.47	153.59	0.15833
4	7	19	2	123.59	554.37	554.52	554.68	153.81	153.92	154.03	0.15833
4	7	19	2	123.56	554.98	555.14	555.29	154.26	154.38	154.49	0.15833
4	7	21	2	121.85	598.20	598.37	598.54	242.35	242.91	243.47	0.17500
4	7	21	2	121.82	598.88	599.05	599.22	244.61	245.18	245.75	0.17500
4	7	21	2	121.79	599.56	599.73	599.90	246.90	247.47	248.05	0.17500
8	7	15	2	113.21	832.58	832.70	832.82	275.31	277.14	278.98	0.16304
8	7	15	2	113.19	833.06	833.18	833.30	282.65	284.48	286.32	0.16304
8	7	16	2	112.33	858.10	858.23	858.36	317.49	319.60	321.71	0.17391
8	7	16	2	112.32	858.62	858.75	858.88	325.93	328.05	330.16	0.17391
8	7	15	2	111.57	880.79	880.91	881.03	339.94	342.04	344.15	0.16304
8	7	15	2	111.55	881.27	881.39	881.51	348.36	350.46	352.57	0.16304
9	7	16	2	106.60	974.17	974.29	974.42	149.66	153.18	156.70	0.20779
9	7	15	2	106.08	981.26	981.38	981.50	347.26	350.71	354.16	0.19481
9	7	11	2	105.35	991.20	991.29	991.37	281.58	284.32	287.05	0.14286
9	7	11	2	104.44	1003.62	1003.71	1003.80	317.93	320.84	323.75	0.14286
9	7	12	2	103.58	1015.31	1015.40	1015.50	349.02	352.32	355.62	0.15584
9	7	12	2	102.69	1027.45	1027.55	1027.65	49.56	52.96	56.37	0.15584
10	7	21	2	101.08	1049.70	1049.86	1050.03	132.25	138.52	144.80	0.15672
10	7	21	2	100.33	1060.22	1060.39	1060.56	167.46	173.92	180.37	0.15672
10	7	20	2	99.62	1070.28	1070.44	1070.61	196.27	202.60	208.93	0.14925
10	7	19	2	98.94	1080.01	1080.16	1080.31	223.24	229.43	235.63	0.14179
10	7	18	2	98.21	1090.73	1090.87	1091.02	304.04	310.12	316.21	0.13433
10	7	18	2	97.59	1099.80	1099.94	1100.09	329.96	336.23	342.50	0.13433

10	7	17	2	96.99	1108.63	1108.76	1108.90	356.72	2.82	8.91	0.12687
11	7	15	2	94.80	1141.96	1142.08	1142.20	109.25	115.15	121.04	0.11719
11	7	15	2	94.29	1149.88	1150.00	1150.12	138.98	145.00	151.02	0.11719
11	7	15	2	93.79	1157.64	1157.76	1157.88	168.92	175.06	181.19	0.11719
11	7	14	2	93.61	1160.50	1160.62	1160.73	314.55	320.31	326.07	0.10938
11	7	14	2	93.15	1167.79	1167.90	1168.01	329.39	335.25	341.11	0.10938
11	7	14	2	92.69	1175.15	1175.26	1175.38	354.85	0.81	6.77	0.10938
11	7	14	2	92.24	1182.45	1182.56	1182.67	23.63	29.70	35.77	0.10938
11	7	14	2	91.80	1189.54	1189.65	1189.76	48.06	54.23	60.41	0.10938
11	7	13	2	91.38	1196.48	1196.58	1196.69	71.33	77.17	83.01	0.10156
12	7	12	2	89.27	1231.84	1231.94	1232.04	303.76	309.42	315.09	0.10435
12	7	11	2	88.92	1237.83	1237.92	1238.01	294.66	299.85	305.05	0.09565
12	7	11	2	88.58	1243.80	1243.89	1243.98	283.74	288.93	294.11	0.09565
12	7	11	2	88.21	1250.13	1250.22	1250.31	292.81	297.97	303.13	0.09565
12	7	11	2	87.86	1256.21	1256.30	1256.39	285.58	290.71	295.84	0.09565
12	7	11	2	87.52	1262.19	1262.28	1262.36	270.49	275.60	280.71	0.09565
12	7	11	2	87.19	1268.19	1268.28	1268.36	255.19	260.28	265.37	0.09565
12	7	11	2	86.86	1274.08	1274.17	1274.26	232.62	237.69	242.77	0.09565
12	7	11	2	86.53	1279.93	1280.02	1280.11	206.28	211.34	216.40	0.09565
12	7	11	2	86.21	1285.75	1285.84	1285.93	177.65	182.70	187.74	0.09565
12	7	4	2	86.11	1287.60	1287.63	1287.66	282.58	284.41	286.24	0.03478
13	7	11	2	84.22	1322.45	1322.54	1322.63	91.11	96.11	101.11	0.09322
13	7	10	2	84.06	1325.63	1325.71	1325.79	269.87	274.40	278.93	0.08475
13	7	12	2	83.70	1332.43	1332.52	1332.62	291.26	296.66	302.08	0.10169
13	7	10	2	83.39	1338.45	1338.53	1338.61	267.33	271.82	276.30	0.08475
13	7	10	2	83.09	1344.17	1344.25	1344.33	224.08	228.53	232.97	0.08475
13	7	11	2	82.79	1349.88	1349.96	1350.05	177.50	182.35	187.20	0.09322
13	7	10	2	82.50	1355.59	1355.67	1355.75	127.90	132.25	136.60	0.08475
13	7	11	2	82.21	1361.38	1361.46	1361.55	77.51	82.23	86.94	0.09322
13	7	11	2	81.91	1367.15	1367.24	1367.33	21.84	26.47	31.11	0.09322
13	7	11	2	81.62	1372.96	1373.05	1373.14	323.16	327.73	332.28	0.09322
13	7	11	2	81.33	1378.79	1378.87	1378.96	259.87	264.35	268.84	0.09322

14	7	14	2	79.85	1409.06	1409.17	1409.28	301.51	306.91	312.31	0.11570
14	7	14	2	79.50	1416.20	1416.32	1416.43	282.92	288.31	293.68	0.11570
14	7	11	2	79.24	1421.63	1421.72	1421.81	181.49	185.72	189.94	0.09091
14	7	11	2	78.95	1427.75	1427.84	1427.93	112.49	116.70	120.92	0.09091
14	7	11	2	78.66	1433.98	1434.06	1434.15	47.66	51.86	56.06	0.09091
14	7	12	2	78.37	1440.24	1440.34	1440.44	343.50	348.06	352.61	0.09917
14	7	12	2	78.07	1446.54	1446.64	1446.73	278.96	283.48	288.00	0.09917
14	7	12	2	77.78	1452.85	1452.95	1453.05	212.70	217.17	221.65	0.09917
14	7	12	2	77.49	1459.26	1459.36	1459.46	147.88	152.30	156.73	0.09917
14	7	12	2	77.20	1465.76	1465.85	1465.95	83.11	87.49	91.85	0.09917
15	7	17	2	74.01	1539.02	1539.16	1539.30	304.77	310.31	315.86	0.14530
15	7	14	2	73.74	1545.41	1545.52	1545.64	202.75	207.29	211.83	0.11966
15	7	14	2	73.44	1552.84	1552.96	1553.07	138.22	142.65	147.08	0.11966
15	7	14	2	73.13	1560.25	1560.36	1560.47	64.78	69.07	73.36	0.11966
15	7	14	2	72.83	1567.78	1567.89	1568.00	346.22	350.37	354.52	0.11966
15	7	14	2	72.52	1575.39	1575.50	1575.62	264.53	268.63	272.73	0.11966
15	7	15	2	72.21	1583.12	1583.25	1583.37	180.39	184.68	188.97	0.12821
15	7	15	2	71.90	1590.95	1591.08	1591.20	95.23	99.45	103.66	0.12821
16	7	16	2	70.55	1625.87	1626.00	1626.13	244.14	248.68	253.21	0.13675
16	7	16	2	70.24	1634.32	1634.45	1634.58	180.00	184.52	189.03	0.13675
16	7	17	2	69.92	1642.87	1643.00	1643.14	115.54	120.26	124.98	0.14530
16	7	17	2	69.61	1651.44	1651.57	1651.71	52.40	57.19	61.98	0.14530
16	7	17	2	69.29	1660.18	1660.32	1660.45	350.82	355.30	359.75	0.14530
16	7	17	2	68.98	1668.87	1669.01	1669.15	271.79	276.23	280.67	0.14530
16	7	17	2	68.66	1677.75	1677.89	1678.02	199.88	204.34	208.81	0.14530
17	7	18	2	67.39	1714.79	1714.94	1715.08	331.29	335.99	340.69	0.13846
17	7	18	2	67.07	1724.17	1724.31	1724.46	270.05	274.55	279.04	0.13846
17	7	18	2	66.76	1733.54	1733.68	1733.83	193.58	197.94	202.30	0.13846
17	7	19	2	66.45	1743.12	1743.27	1743.43	128.11	132.86	137.60	0.14615
17	7	19	2	66.14	1752.64	1752.80	1752.95	56.65	61.16	65.66	0.14615
17	7	19	2	65.84	1762.42	1762.58	1762.73	342.02	346.46	350.90	0.14615
17	7	19	2	65.53	1772.33	1772.49	1772.64	265.23	269.58	273.92	0.14615

18	7	20	2	64.55	1804.55	1804.71	1804.88	114.28	118.88	123.47	0.16000
18	7	20	2	64.24	1814.90	1815.06	1815.22	47.69	52.20	56.70	0.16000
18	7	21	2	63.94	1825.24	1825.41	1825.58	339.46	344.31	349.15	0.16800
18	7	21	2	63.64	1835.89	1836.06	1836.23	282.20	286.98	291.76	0.16800
18	7	21	2	63.34	1846.68	1846.85	1847.02	224.27	228.94	233.61	0.16800
18	7	22	2	63.03	1857.67	1857.85	1858.02	163.53	168.41	173.30	0.17600
22	7	29	2	59.15	2010.97	2011.20	2011.43	305.51	311.43	317.32	0.22481
22	7	25	2	58.84	2023.92	2024.12	2024.32	266.89	271.89	276.89	0.19380
22	7	25	2	58.55	2036.42	2036.63	2036.83	220.49	225.61	230.72	0.19380
22	7	25	2	58.27	2048.92	2049.12	2049.33	178.26	183.22	188.20	0.19380
22	7	25	2	57.98	2061.42	2061.62	2061.83	134.66	139.80	144.93	0.19380
23	7	26	2	57.13	2099.62	2099.83	2100.04	349.16	354.14	359.12	0.20000
23	7	26	2	56.85	2112.39	2112.60	2112.81	287.51	292.37	297.24	0.20000
23	7	26	2	56.56	2125.84	2126.05	2126.26	242.30	247.26	252.20	0.20000
23	7	26	2	56.29	2138.61	2138.82	2139.03	180.22	185.11	190.00	0.20000
23	7	26	2	55.95	2154.72	2154.93	2155.14	186.70	191.24	195.79	0.20000
24	7	28	2	54.30	2235.29	2235.51	2235.74	42.66	46.94	51.23	0.15819
24	7	29	2	54.02	2249.55	2249.79	2250.02	312.25	316.59	320.92	0.16384
24	7	29	2	53.74	2263.83	2264.07	2264.30	218.17	222.57	226.96	0.16384
24	7	30	2	53.45	2278.66	2278.91	2279.15	136.81	141.47	146.12	0.16949
24	7	30	2	53.16	2293.83	2294.07	2294.32	61.30	65.71	70.12	0.16949
24	7	31	2	52.98	2303.25	2303.50	2303.75	231.89	236.35	240.80	0.17514
25	7	32	2	52.59	2323.78	2324.03	2324.29	223.69	228.07	232.48	0.24427
25	7	32	2	52.30	2339.57	2339.82	2340.08	140.71	145.19	149.67	0.24427
25	7	33	2	51.99	2355.93	2356.19	2356.46	57.71	62.10	66.48	0.25191
25	7	34	2	51.69	2372.65	2372.93	2373.20	326.99	331.30	335.60	0.25954
26	7	35	2	50.76	2424.09	2424.38	2424.66	55.48	60.01	64.52	0.24476
26	7	36	2	50.45	2441.98	2442.27	2442.56	342.37	347.02	351.66	0.25175
26	7	36	2	50.14	2459.63	2459.92	2460.21	256.62	260.99	265.34	0.25175
26	7	36	2	49.84	2477.28	2477.57	2477.86	156.87	161.22	165.57	0.25175
30	7	35	2	47.50	2618.83	2619.11	2619.39	225.04	229.43	233.81	0.24823
30	7	35	2	47.22	2635.97	2636.25	2636.54	136.26	140.69	145.13	0.24823

30	7	35	2	46.95	2653.12	2653.40	2653.68	41.17	45.45	49.74	0.24823
30	7	36	2	46.68	2670.85	2671.14	2671.43	307.27	311.52	315.79	0.25532
31	7	37	2	46.02	2713.86	2714.16	2714.46	249.23	254.22	259.19	0.23871
31	7	36	2	45.75	2731.57	2731.86	2732.15	176.18	180.77	185.36	0.23226
31	7	38	2	45.66	2737.24	2737.55	2737.86	265.67	270.51	275.34	0.24516
31	7	44	2	45.33	2759.52	2759.87	2760.23	258.66	264.42	270.19	0.28387
32	7	34	2	44.62	2808.11	2808.39	2808.66	3.24	7.94	12.65	0.25185
32	7	34	2	44.37	2824.78	2825.06	2825.33	279.92	284.46	289.02	0.25185
32	7	33	2	44.14	2840.81	2841.08	2841.34	186.73	191.13	195.52	0.24444
32	7	34	2	43.90	2857.78	2858.05	2858.33	98.46	102.75	107.01	0.25185
33	7	46	2	43.41	2892.60	2892.97	2893.34	280.09	285.84	291.60	0.34074
33	7	53	2	43.05	2918.43	2918.86	2919.29	333.11	340.30	347.50	0.39259
33	7	36	2	42.82	2935.08	2935.38	2935.67	252.34	257.05	261.73	0.26667
34	7	36	2	42.10	2987.86	2988.15	2988.44	326.86	331.49	336.13	0.25899
34	7	36	2	41.86	3005.79	3006.08	3006.37	261.58	266.37	271.17	0.25899
34	7	35	2	41.63	3023.00	3023.28	3023.56	182.22	186.76	191.32	0.25180
34	7	32	2	41.39	3041.58	3041.84	3042.09	117.49	121.57	125.66	0.23022
35	7	33	2	40.26	3128.92	3129.18	3129.45	9.01	12.92	16.83	0.24444
35	7	34	2	40.05	3145.44	3145.72	3145.99	250.53	254.31	258.08	0.25185
35	7	34	2	39.84	3162.06	3162.33	3162.61	105.91	109.67	113.43	0.25185
35	7	34	2	39.64	3178.78	3179.05	3179.33	338.17	341.89	345.62	0.25185
36	7	35	2	39.22	3212.54	3212.82	3213.11	82.27	86.20	90.14	0.25000
36	7	35	2	39.01	3229.56	3229.84	3230.12	319.54	323.49	327.46	0.25000
36	7	35	2	38.80	3246.71	3246.99	3247.27	197.31	201.13	204.94	0.25000
36	7	35	2	38.59	3263.95	3264.23	3264.51	55.24	58.75	62.25	0.25000
37	7	36	2	38.18	3298.79	3299.08	3299.37	181.27	185.67	190.06	0.25000
37	7	36	2	37.97	3316.33	3316.62	3316.91	66.32	70.21	74.11	0.25000
37	7	36	2	37.76	3333.99	3334.28	3334.57	300.82	304.71	308.59	0.25000
37	7	36	2	37.55	3351.78	3352.07	3352.36	184.92	189.03	193.16	0.25000
38	7	37	2	37.03	3396.40	3396.69	3396.99	147.69	152.32	156.94	0.24832
38	7	37	2	36.83	3414.57	3414.87	3415.17	54.23	58.37	62.49	0.24832
38	7	37	2	36.62	3432.87	3433.17	3433.47	298.43	302.40	306.35	0.24832

38	7	38	2	36.41	3451.25	3451.56	3451.87	180.01	183.99	187.97	0.25503
39	7	38	2	36.00	3488.38	3488.68	3488.99	338.21	342.80	347.38	0.24675
39	7	38	2	35.81	3505.46	3505.76	3506.07	236.71	241.28	245.85	0.24675
39	7	39	2	35.60	3524.31	3524.62	3524.94	144.18	148.32	152.45	0.25325
39	7	39	2	35.34	3547.40	3547.72	3548.03	74.14	78.17	82.22	0.25325
40	7	39	2	35.14	3566.58	3566.90	3567.21	328.11	332.16	336.20	0.24684
40	7	39	2	34.93	3585.76	3586.07	3586.39	215.38	219.53	223.71	0.24684
40	7	40	2	34.72	3605.10	3605.43	3605.75	133.63	138.54	143.48	0.25316
40	7	40	2	34.51	3624.58	3624.90	3625.22	58.19	62.84	67.50	0.25316
41	7	41	2	34.14	3659.87	3660.20	3660.53	211.01	215.60	220.20	0.25000
41	7	41	2	33.93	3679.64	3679.97	3680.30	132.40	136.86	141.32	0.25000
41	7	41	2	33.72	3699.59	3699.92	3700.25	48.96	53.66	58.35	0.25000
41	7	41	2	33.52	3719.65	3719.98	3720.31	331.37	335.94	340.50	0.25000
42	7	42	2	32.69	3800.41	3800.75	3801.09	2.48	6.70	10.90	0.32813
42	7	43	2	32.49	3821.06	3821.40	3821.75	238.50	242.57	246.65	0.33594
42	7	43	2	32.28	3841.89	3842.23	3842.58	147.97	152.40	156.82	0.33594
43	7	44	2	31.65	3905.16	3905.51	3905.87	137.36	141.43	145.52	0.33333
43	7	44	2	31.44	3926.49	3926.85	3927.20	78.41	83.74	89.03	0.33333
43	7	44	2	31.24	3947.99	3948.35	3948.70	18.43	23.16	27.93	0.33333
44	7	45	2	30.82	3991.34	3991.70	3992.07	317.64	323.82	330.03	0.33333
44	7	45	2	30.63	4011.72	4012.08	4012.44	314.08	320.36	326.65	0.33333
44	7	45	2	30.42	4033.73	4034.10	4034.46	313.36	318.96	324.55	0.33333
45	7	46	2	30.00	4078.17	4078.55	4078.92	220.91	226.01	231.11	0.33094
45	7	46	2	29.79	4100.59	4100.96	4101.33	170.14	175.12	180.10	0.33094
45	7	47	2	29.58	4123.16	4123.53	4123.91	106.61	111.42	116.22	0.33813
46	7	47	2	29.17	4168.74	4169.12	4169.50	240.39	244.24	248.13	0.33099
46	7	47	2	28.96	4191.73	4192.10	4192.48	145.28	150.02	154.74	0.33099
46	7	48	2	28.75	4214.86	4215.25	4215.63	76.41	81.44	86.46	0.33803
47	7	48	2	28.33	4261.58	4261.96	4262.35	299.26	303.68	308.12	0.32877
47	7	49	2	28.12	4285.17	4285.57	4285.96	212.82	217.47	222.15	0.33562
47	7	49	2	27.91	4308.89	4309.28	4309.68	121.98	125.68	129.36	0.33562
48	7	50	2	27.49	4356.78	4357.19	4357.59	245.95	250.28	254.61	0.33333

48	7	50	2	27.28	4380.95	4381.36	4381.76	136.74	140.75	144.74	0.33333
48	7	50	2	27.07	4405.28	4405.68	4406.09	29.28	33.63	37.99	0.33333
50	7	70	2	23.20	4880.35	4880.91	4881.47	52.41	58.36	64.27	0.49645
50	7	71	2	22.94	4914.02	4914.59	4915.17	30.45	36.25	42.03	0.50355
51	7	72	2	20.63	5223.35	5223.93	5224.52	322.70	328.36	334.01	0.49655
51	7	73	2	20.38	5258.27	5258.86	5259.45	279.18	284.36	289.52	0.50345
54	7	72	2	16.98	5751.12	5751.70	5752.28	78.31	83.72	89.12	0.51429
54	7	68	2	16.77	5783.34	5783.89	5784.44	18.13	23.28	28.45	0.48571
55	7	64	2	14.79	6091.02	6091.54	6092.05	54.60	59.44	64.27	0.49612
55	7	65	2	14.60	6122.07	6122.59	6123.12	351.51	356.73	1.97	0.50388
56	7	68	2	12.84	6409.51	6410.05	6410.60	94.99	100.12	105.25	0.50000
56	7	68	2	12.64	6442.15	6442.70	6443.25	35.15	39.98	44.80	0.50000
57	7	72	2	10.87	6744.36	6744.94	6745.52	355.12	359.82	4.53	0.50000
57	7	72	2	10.68	6778.65	6779.23	6779.82	279.21	283.86	288.50	0.50000
58	7	75	2	8.91	7094.57	7095.17	7095.78	305.09	309.38	313.65	0.50000
58	7	75	2	8.71	7130.50	7131.11	7131.71	222.31	227.22	232.11	0.50000
59	7	77	2	7.33	7386.26	7386.88	7387.50	321.25	325.82	330.38	0.49677
59	7	78	2	7.13	7423.24	7423.87	7424.50	227.48	232.03	236.61	0.50323
60	7	80	2	5.56	7725.33	7725.97	7726.62	313.17	317.71	322.28	0.50000
60	7	80	2	5.36	7763.56	7764.21	7764.85	212.63	216.93	221.23	0.50000
1	8	1	10	142.14	147.78	147.82	147.86	78.49	77.31	76.13	0.03030
1	8	1	10	142.13	147.94	147.99	148.03	73.76	72.58	71.39	0.03030
1	8	1	10	142.12	148.11	148.15	148.19	69.03	67.85	66.66	0.03030
1	8	1	10	142.11	148.27	148.31	148.35	64.30	63.12	61.93	0.03030
1	8	1	12	141.66	157.01	157.06	157.11	170.87	169.48	168.09	0.03030
1	8	1	12	141.65	157.20	157.25	157.30	165.32	163.93	162.55	0.03030
1	8	1	12	141.64	157.40	157.44	157.49	159.77	158.39	157.00	0.03030
1	8	1	12	141.63	157.59	157.64	157.69	154.23	152.85	151.46	0.03030
1	8	1	10	141.17	166.59	166.63	166.67	259.40	258.27	257.14	0.03030
1	8	1	10	141.16	166.75	166.79	166.83	254.88	253.76	252.63	0.03030
1	8	1	10	141.15	166.91	166.95	166.99	250.37	249.24	248.12	0.03030

1	8	1	10	141.14	167.07	167.11	167.15	245.86	244.73	243.60	0.03030
1	8	1	10	141.13	167.23	167.27	167.31	241.35	240.22	239.10	0.03030
1	8	1	10	140.66	176.53	176.57	176.61	344.30	343.20	342.10	0.03030
1	8	1	10	140.65	176.69	176.73	176.77	339.89	338.79	337.69	0.03030
1	8	1	10	140.64	176.85	176.89	176.93	335.49	334.39	333.29	0.03030
1	8	1	10	140.63	177.02	177.06	177.10	331.08	329.98	328.88	0.03030
1	8	1	10	140.62	177.18	177.22	177.26	326.68	325.58	324.48	0.03030
1	8	1	10	140.14	186.77	186.81	186.85	68.08	67.01	65.94	0.03030
1	8	1	10	140.13	186.93	186.97	187.01	63.79	62.71	61.64	0.03030
1	8	1	10	140.12	187.09	187.13	187.17	59.49	58.42	57.35	0.03030
1	8	1	10	140.11	187.25	187.29	187.33	55.20	54.13	53.06	0.03030
1	8	1	10	140.10	187.41	187.45	187.49	50.91	49.84	48.77	0.03030
1	8	1	10	139.61	197.17	197.21	197.25	154.88	153.84	152.80	0.03030
1	8	1	10	139.60	197.33	197.37	197.41	150.71	149.67	148.63	0.03030
1	8	1	10	139.60	197.49	197.53	197.57	146.54	145.50	144.46	0.03030
1	8	1	10	139.59	197.65	197.69	197.73	142.38	141.34	140.29	0.03030
1	8	1	10	139.58	197.81	197.85	197.89	138.21	137.17	136.13	0.03030
1	8	1	10	139.07	208.05	208.09	208.13	237.87	236.86	235.85	0.03030
1	8	1	10	139.06	208.22	208.26	208.30	233.84	232.83	231.82	0.03030
1	8	1	10	139.05	208.38	208.42	208.46	229.81	228.80	227.79	0.03030
1	8	1	10	139.04	208.54	208.58	208.62	225.78	224.77	223.77	0.03030
1	8	1	10	139.03	208.70	208.74	208.78	221.75	220.75	219.74	0.03030
2	8	16	2	135.06	290.60	290.73	290.86	210.09	207.59	205.10	0.09412
2	8	16	2	135.03	291.12	291.25	291.37	200.11	197.62	195.14	0.09412
2	8	21	2	134.68	298.65	298.82	298.99	57.16	54.01	50.86	0.12353
2	8	21	2	134.64	299.33	299.50	299.67	44.57	41.43	38.29	0.12353
2	8	20	2	133.65	320.74	320.90	321.06	29.69	27.05	24.40	0.11765
2	8	20	2	133.62	321.39	321.55	321.71	19.12	16.48	13.85	0.11765
2	8	20	2	133.59	322.03	322.19	322.35	8.59	5.96	3.34	0.11765
2	8	18	2	132.90	336.84	336.98	337.13	138.37	136.22	134.08	0.10588
2	8	18	2	132.88	337.42	337.56	337.71	129.79	127.65	125.51	0.10588
3	8	23	2	127.53	458.50	458.69	458.87	3.83	2.81	1.79	0.09237

3	8	23	2	127.50	459.25	459.43	459.62	359.75	358.74	357.73	0.09237
3	8	23	2	127.47	459.99	460.17	460.36	355.71	354.71	353.72	0.09237
3	8	21	2	126.48	483.57	483.74	483.91	249.75	249.14	248.53	0.08434
3	8	21	2	126.45	484.25	484.42	484.59	247.32	246.71	246.11	0.08434
3	8	21	2	126.42	484.93	485.10	485.27	244.91	244.31	243.72	0.08434
3	8	21	2	126.40	485.61	485.78	485.94	242.53	241.94	241.35	0.08434
3	8	24	2	125.05	518.10	518.30	518.49	164.95	164.69	164.43	0.09639
3	8	24	2	125.02	518.88	519.07	519.27	163.92	163.67	163.41	0.09639
3	8	24	2	124.99	519.65	519.85	520.04	162.91	162.66	162.42	0.09639
3	8	24	2	124.96	520.43	520.62	520.81	161.94	161.71	161.48	0.09639
4	8	23	2	123.50	556.41	556.60	556.78	155.39	155.55	155.71	0.09312
4	8	23	2	123.47	557.15	557.34	557.52	156.04	156.20	156.37	0.09312
4	8	23	2	123.44	557.89	558.08	558.27	156.72	156.89	157.07	0.09312
4	8	23	2	123.41	558.64	558.82	559.01	157.43	157.61	157.80	0.09312
4	8	23	2	123.38	559.38	559.56	559.75	158.18	158.37	158.57	0.09312
4	8	22	2	121.73	601.20	601.38	601.56	252.56	253.18	253.80	0.08907
4	8	22	2	121.70	601.91	602.09	602.27	255.05	255.67	256.30	0.08907
4	8	22	2	121.67	602.62	602.80	602.98	257.57	258.20	258.84	0.08907
4	8	22	2	121.65	603.33	603.51	603.69	260.12	260.76	261.41	0.08907
4	8	22	2	121.62	604.04	604.22	604.40	262.71	263.35	264.01	0.08907
4	8	22	2	121.59	604.75	604.93	605.11	265.31	265.97	266.63	0.08907
8	8	21	2	113.15	834.22	834.39	834.55	300.18	302.76	305.34	0.10938
8	8	21	2	113.13	834.89	835.06	835.23	310.51	313.09	315.68	0.10938
8	8	21	2	113.10	835.57	835.74	835.91	320.86	323.45	326.04	0.10938
8	8	22	2	112.27	859.88	860.05	860.23	346.55	349.46	352.38	0.11458
8	8	22	2	112.25	860.59	860.76	860.94	358.22	1.14	4.06	0.11458
8	8	22	2	112.22	861.30	861.47	861.65	9.92	12.85	15.78	0.11458
8	8	21	2	111.51	882.43	882.60	882.77	8.60	11.55	14.51	0.10938
8	8	21	2	111.49	883.11	883.28	883.45	20.43	23.39	26.35	0.10938
8	8	21	2	111.47	883.79	883.96	884.12	32.28	35.25	38.22	0.10938
9	8	20	2	107.67	959.04	959.20	959.36	119.92	123.81	127.69	0.10753
9	8	20	2	107.62	959.68	959.84	960.00	135.48	139.38	143.29	0.10753

9	8	19	2	106.51	975.34	975.50	975.65	181.87	186.07	190.28	0.10215
9	8	19	2	106.46	975.96	976.11	976.26	198.72	202.94	207.17	0.10215
9	8	18	2	106.00	982.37	982.52	982.66	19.10	23.27	27.44	0.09677
9	8	18	2	105.96	982.96	983.10	983.25	35.81	40.00	44.19	0.09677
9	8	21	2	105.28	992.08	992.24	992.41	308.73	313.98	319.24	0.11290
9	8	21	2	104.37	1004.53	1004.70	1004.86	347.60	353.18	358.76	0.11290
9	8	15	2	103.51	1016.24	1016.36	1016.49	20.94	25.08	29.21	0.08065
9	8	15	2	103.47	1016.73	1016.85	1016.97	37.49	41.63	45.76	0.08065
10	8	19	2	101.03	1050.43	1050.58	1050.74	159.46	165.15	170.84	0.13869
10	8	19	2	100.28	1060.94	1061.09	1061.24	194.83	200.68	206.54	0.13869
10	8	18	2	99.57	1070.98	1071.12	1071.27	223.49	229.20	234.90	0.13139
10	8	17	2	98.90	1080.69	1080.83	1080.97	250.95	256.50	262.06	0.12409
10	8	17	2	98.73	1083.17	1083.31	1083.44	351.58	357.19	2.79	0.12409
10	8	16	2	98.16	1091.38	1091.51	1091.64	331.44	336.85	342.27	0.11679
10	8	16	2	97.55	1100.42	1100.55	1100.68	356.80	2.39	7.97	0.11679
10	8	15	2	96.95	1109.24	1109.36	1109.48	23.97	29.35	34.74	0.10949
11	8	14	2	94.76	1142.51	1142.62	1142.73	135.99	141.50	147.01	0.11966
11	8	14	2	94.25	1150.41	1150.52	1150.63	165.47	171.08	176.70	0.11966
11	8	13	2	93.76	1158.19	1158.30	1158.40	196.74	202.06	207.39	0.11111
11	8	13	2	93.58	1161.03	1161.13	1161.24	341.32	346.68	352.04	0.11111
11	8	13	2	93.12	1168.31	1168.42	1168.52	356.60	2.05	7.51	0.11111
11	8	13	2	92.66	1175.65	1175.75	1175.86	21.26	26.81	32.35	0.11111
11	8	13	2	92.21	1182.95	1183.05	1183.16	50.52	56.16	61.81	0.11111
11	8	12	2	91.77	1190.04	1190.13	1190.23	75.42	80.72	86.03	0.10256
11	8	12	2	91.35	1196.95	1197.05	1197.15	97.83	103.22	108.61	0.10256
12	8	10	2	89.25	1232.29	1232.37	1232.45	329.73	334.45	339.17	0.05051
12	8	21	2	88.89	1238.33	1238.50	1238.67	323.94	333.86	343.77	0.10606
12	8	21	2	88.54	1244.30	1244.47	1244.64	312.95	322.84	332.73	0.10606
12	8	10	2	88.19	1250.57	1250.65	1250.73	318.14	322.83	327.52	0.05051
12	8	10	2	87.84	1256.64	1256.72	1256.80	310.30	314.96	319.63	0.05051
12	8	21	2	87.49	1262.69	1262.86	1263.03	299.28	309.03	318.78	0.10606
12	8	21	2	87.15	1268.69	1268.86	1269.03	283.86	293.57	303.28	0.10606

12	8	21	2	86.82	1274.58	1274.75	1274.92	261.20	270.88	280.56	0.10606
12	8	21	2	86.50	1280.42	1280.59	1280.76	234.32	243.97	253.63	0.10606
12	8	21	2	86.18	1286.24	1286.41	1286.58	205.62	215.24	224.87	0.10606
12	8	21	2	86.08	1287.92	1288.09	1288.26	300.90	310.51	320.13	0.10606
13	8	20	2	84.19	1322.93	1323.10	1323.26	118.37	127.44	136.52	0.08889
13	8	20	2	84.03	1326.10	1326.26	1326.43	296.62	305.68	314.74	0.08889
13	8	22	2	83.67	1332.95	1333.13	1333.30	320.58	330.50	340.41	0.09778
13	8	20	2	83.36	1338.93	1339.09	1339.26	294.24	303.20	312.15	0.08889
13	8	20	2	83.06	1344.64	1344.80	1344.96	250.32	259.21	268.10	0.08889
13	8	20	2	82.76	1350.36	1350.52	1350.68	203.93	212.73	221.52	0.08889
13	8	20	2	82.47	1356.07	1356.23	1356.39	153.56	162.25	170.93	0.08889
13	8	21	2	82.18	1361.86	1362.03	1362.20	103.22	112.21	121.20	0.09333
13	8	20	2	81.89	1367.63	1367.79	1367.96	47.13	55.54	63.95	0.08889
13	8	21	2	81.59	1373.45	1373.62	1373.79	348.02	356.71	5.41	0.09333
13	8	21	2	81.30	1379.28	1379.45	1379.62	284.72	293.27	301.81	0.09333
14	8	13	2	79.82	1409.58	1409.69	1409.79	326.60	331.63	336.65	0.06341
14	8	12	2	79.48	1416.72	1416.82	1416.91	307.53	312.15	316.76	0.05854
14	8	22	2	79.22	1422.13	1422.31	1422.48	205.30	213.74	222.18	0.10732
14	8	22	2	78.93	1428.26	1428.44	1428.61	136.63	145.05	153.47	0.10732
14	8	22	2	78.63	1434.49	1434.67	1434.85	72.09	80.48	88.87	0.10732
14	8	22	2	78.34	1440.77	1440.94	1441.12	8.18	16.52	24.86	0.10732
14	8	23	2	78.05	1447.06	1447.25	1447.43	303.44	312.11	320.77	0.11220
14	8	23	2	77.75	1453.38	1453.56	1453.75	236.96	245.53	254.11	0.11220
14	8	23	2	77.46	1459.80	1459.98	1460.17	172.22	180.71	189.18	0.11220
14	8	23	2	77.17	1466.30	1466.48	1466.67	107.52	115.89	124.26	0.11220
15	8	16	2	73.98	1539.63	1539.76	1539.89	329.23	334.45	339.67	0.14953
15	8	13	2	73.72	1545.91	1546.01	1546.12	222.87	227.09	231.30	0.12150
15	8	13	2	73.42	1553.34	1553.44	1553.55	157.52	161.63	165.74	0.12150
15	8	13	2	73.11	1560.75	1560.85	1560.96	83.78	87.76	91.73	0.12150
15	8	13	2	72.81	1568.29	1568.39	1568.50	4.89	8.74	12.58	0.12150
15	8	13	2	72.50	1575.92	1576.02	1576.13	283.56	287.36	291.15	0.12150
15	8	13	2	72.19	1583.66	1583.77	1583.87	199.55	203.27	206.99	0.12150

15	8	13	2	71.88	1591.50	1591.61	1591.71	114.34	118.00	121.65	0.12150
16	8	14	2	70.53	1626.46	1626.57	1626.68	264.54	268.50	272.47	0.13462
16	8	15	2	70.22	1634.89	1635.01	1635.13	200.04	204.28	208.52	0.14423
16	8	15	2	69.90	1643.45	1643.58	1643.70	135.81	139.98	144.15	0.14423
16	8	15	2	69.59	1652.03	1652.15	1652.27	72.95	77.16	81.36	0.14423
16	8	15	2	69.27	1660.78	1660.90	1661.03	10.46	14.38	18.29	0.14423
16	8	15	2	68.96	1669.48	1669.60	1669.72	291.39	295.31	299.23	0.14423
16	8	15	2	68.64	1678.36	1678.48	1678.61	219.83	223.77	227.71	0.14423
17	8	16	2	67.36	1715.44	1715.57	1715.70	352.43	356.61	0.78	0.13675
17	8	17	2	67.05	1724.80	1724.93	1725.07	289.51	293.73	297.95	0.14530
17	8	16	2	66.74	1734.19	1734.32	1734.45	213.23	217.12	221.01	0.13675
17	8	17	2	66.43	1743.77	1743.91	1744.05	148.32	152.57	156.81	0.14530
17	8	17	2	66.12	1753.30	1753.43	1753.57	75.83	79.85	83.88	0.14530
17	8	17	2	65.82	1763.09	1763.23	1763.37	1.41	5.38	9.35	0.14530
17	8	17	2	65.51	1773.02	1773.16	1773.29	284.66	288.55	292.44	0.14530
18	8	18	2	64.53	1805.27	1805.42	1805.56	134.76	138.91	143.06	0.16216
18	8	18	2	64.22	1815.62	1815.76	1815.91	67.74	71.80	75.86	0.16216
18	8	18	2	63.92	1825.96	1826.11	1826.25	0.24	4.39	8.54	0.16216
18	8	19	2	63.62	1836.61	1836.76	1836.91	302.46	306.78	311.11	0.17117
18	8	19	2	63.32	1847.41	1847.57	1847.72	244.50	248.72	252.94	0.17117
18	8	19	2	63.01	1858.43	1858.58	1858.73	184.41	188.63	192.86	0.17117
22	8	26	2	59.12	2011.94	2012.15	2012.36	330.07	335.32	340.57	0.22609
22	8	23	2	58.82	2024.76	2024.95	2025.13	287.91	292.52	297.14	0.20000
22	8	22	2	58.53	2037.29	2037.46	2037.64	242.40	246.91	251.42	0.19130
22	8	22	2	58.25	2049.79	2049.96	2050.14	199.51	203.87	208.26	0.19130
22	8	22	2	57.96	2062.29	2062.46	2062.64	156.63	161.14	165.66	0.19130
23	8	23	2	57.11	2100.50	2100.69	2100.87	10.03	14.43	18.83	0.16667
23	8	23	2	56.84	2113.26	2113.45	2113.64	307.90	312.20	316.51	0.16667
23	8	23	2	56.55	2126.72	2126.90	2127.09	263.01	267.36	271.71	0.16667
23	8	23	2	56.27	2139.49	2139.67	2139.86	200.71	205.04	209.36	0.16667
23	8	22	2	56.20	2142.67	2142.84	2143.02	274.48	278.60	282.71	0.15942
23	8	24	2	55.93	2155.60	2155.79	2155.99	205.72	209.88	214.05	0.17391

24	8	25	2	54.28	2236.25	2236.45	2236.65	60.89	64.70	68.52	0.15723
24	8	26	2	54.00	2250.53	2250.74	2250.95	330.33	334.20	338.08	0.16352
24	8	26	2	53.72	2264.82	2265.03	2265.24	236.65	240.60	244.53	0.16352
24	8	27	2	53.43	2279.66	2279.87	2280.09	155.92	160.12	164.33	0.16981
24	8	27	2	53.14	2294.86	2295.08	2295.30	80.12	84.08	88.06	0.16981
24	8	28	2	52.96	2304.30	2304.52	2304.75	250.54	254.53	258.52	0.17610
25	8	29	2	52.57	2324.85	2325.08	2325.32	242.00	246.00	250.01	0.24370
25	8	29	2	52.28	2340.64	2340.87	2341.11	159.31	163.37	167.41	0.24370
25	8	30	2	51.97	2357.03	2357.27	2357.52	75.89	79.87	83.84	0.25210
25	8	31	2	51.67	2373.78	2374.03	2374.28	344.70	348.61	352.53	0.26050
26	8	32	2	50.74	2425.26	2425.51	2425.77	74.06	78.19	82.32	0.24615
26	8	33	2	50.43	2443.17	2443.44	2443.71	1.46	5.71	9.96	0.25385
26	8	32	2	50.12	2460.84	2461.10	2461.36	274.75	278.59	282.43	0.24615
26	8	33	2	49.82	2478.47	2478.74	2479.00	174.79	178.79	182.80	0.25385
30	8	65	2	47.47	2620.26	2620.78	2621.30	247.24	255.42	263.62	0.25000
30	8	64	2	47.20	2637.40	2637.92	2638.43	158.67	166.77	174.85	0.24615
30	8	65	2	46.93	2654.54	2655.06	2655.58	62.70	70.66	78.61	0.25000
30	8	66	2	46.65	2672.32	2672.86	2673.39	328.91	336.71	344.49	0.25385
31	8	68	2	45.99	2715.37	2715.92	2716.47	274.45	283.49	292.54	0.23529
31	8	67	2	45.72	2733.03	2733.57	2734.12	199.35	207.87	216.37	0.23183
31	8	74	2	45.64	2738.82	2739.41	2740.01	290.41	299.75	309.07	0.25606
31	8	80	2	45.30	2761.30	2761.94	2762.59	287.69	298.24	308.82	0.27682
32	8	63	2	44.59	2809.50	2810.01	2810.52	26.99	35.67	44.32	0.25200
32	8	63	2	44.35	2826.17	2826.68	2827.18	302.98	311.43	319.90	0.25200
32	8	61	2	44.12	2842.17	2842.66	2843.15	209.11	217.21	225.29	0.24400
32	8	63	2	43.88	2859.17	2859.67	2860.18	120.03	127.89	135.73	0.25200
33	8	84	2	43.38	2894.45	2895.13	2895.81	308.85	319.36	329.88	0.42424
33	8	48	2	43.02	2920.19	2920.58	2920.97	2.75	9.27	15.81	0.24242
33	8	66	2	42.80	2936.56	2937.09	2937.63	276.11	284.60	293.04	0.33333
34	8	66	2	42.08	2989.32	2989.86	2990.39	350.36	358.94	7.54	0.24719
34	8	67	2	41.84	3007.26	3007.80	3008.34	285.79	294.66	303.55	0.25094
34	8	65	2	41.61	3024.43	3024.95	3025.48	205.18	213.60	222.00	0.24345

34	8	9	2	41.57	3028.27	3028.35	3028.42	266.78	267.93	269.09	0.03371
34	8	60	2	41.37	3042.89	3043.38	3043.86	138.31	145.96	153.62	0.22472
35	8	62	2	40.24	3130.28	3130.78	3131.28	29.02	36.36	43.68	0.24900
35	8	62	2	40.03	3146.81	3147.31	3147.81	269.23	275.92	282.54	0.24900
35	8	62	2	39.82	3163.45	3163.95	3164.45	125.01	131.97	138.94	0.24900
35	8	63	2	39.62	3180.16	3180.67	3181.18	357.01	3.91	10.80	0.25301
36	8	63	2	39.20	3213.95	3214.46	3214.97	101.93	109.02	116.09	0.24609
36	8	64	2	38.99	3230.97	3231.48	3232.00	339.34	346.59	353.83	0.25000
36	8	64	2	38.78	3248.14	3248.65	3249.17	216.55	223.45	230.32	0.25000
36	8	65	2	38.57	3265.38	3265.90	3266.42	73.05	79.63	86.22	0.25391
37	8	66	2	38.16	3300.25	3300.78	3301.31	203.32	211.29	219.22	0.24906
37	8	66	2	37.95	3317.79	3318.32	3318.85	85.90	93.02	100.11	0.24906
37	8	66	2	37.74	3335.46	3335.99	3336.53	320.52	327.67	334.83	0.24906
37	8	67	2	37.53	3353.24	3353.78	3354.32	205.78	213.51	221.26	0.25283
38	8	68	2	37.01	3397.90	3398.44	3398.99	170.93	179.39	187.82	0.24818
38	8	68	2	36.81	3416.08	3416.63	3417.18	75.04	82.56	90.05	0.24818
38	8	69	2	36.60	3434.39	3434.94	3435.50	318.57	325.96	333.35	0.25182
38	8	69	2	36.39	3452.79	3453.34	3453.90	199.92	207.18	214.44	0.25182
39	8	70	2	35.98	3489.92	3490.49	3491.05	1.41	9.89	18.37	0.20772
39	8	70	2	35.79	3507.01	3507.58	3508.14	259.87	268.21	276.54	0.20772
39	8	71	2	35.58	3525.87	3526.45	3527.02	164.67	172.12	179.55	0.21068
39	8	54	2	35.53	3530.46	3530.90	3531.33	223.85	229.41	234.96	0.16024
39	8	72	2	35.32	3548.98	3549.56	3550.15	94.57	102.16	109.81	0.21365
40	8	72	2	35.12	3568.17	3568.75	3569.33	348.52	355.98	3.43	0.24828
40	8	72	2	34.91	3587.36	3587.94	3588.52	236.65	244.48	252.36	0.24828
40	8	73	2	34.70	3606.71	3607.30	3607.89	158.15	167.17	176.20	0.25172
40	8	73	2	34.49	3626.20	3626.79	3627.38	81.69	90.31	98.99	0.25172
41	8	74	2	34.12	3661.51	3662.11	3662.70	233.95	242.32	250.75	0.24667
41	8	75	2	33.91	3681.28	3681.89	3682.49	154.58	162.70	170.84	0.25000
41	8	75	2	33.70	3701.25	3701.85	3702.46	72.52	81.07	89.63	0.25000
41	8	76	2	33.50	3721.31	3721.93	3722.54	354.31	2.76	11.24	0.25333
42	8	78	2	32.67	3802.12	3802.75	3803.38	23.68	31.39	39.08	0.33191

42	8	78	2	32.46	3822.77	3823.40	3824.03	258.95	266.65	274.47	0.33191
42	8	79	2	32.26	3843.62	3844.26	3844.89	170.08	178.19	186.30	0.33617
43	8	80	2	31.84	3885.77	3886.42	3887.06	308.18	314.03	319.86	0.33195
43	8	80	2	31.63	3906.92	3907.56	3908.21	157.76	165.39	173.11	0.33195
43	8	81	2	31.42	3928.27	3928.92	3929.57	104.71	114.35	123.97	0.33610
44	8	82	2	30.80	3993.16	3993.82	3994.48	348.74	0.19	11.67	0.33065
44	8	83	2	30.61	4013.53	4014.20	4014.87	345.44	356.96	8.42	0.33468
44	8	83	2	30.40	4035.56	4036.23	4036.90	341.52	351.75	1.95	0.33468
45	8	84	2	29.98	4080.03	4080.71	4081.38	246.42	255.79	265.18	0.33071
45	8	85	2	29.77	4102.45	4103.13	4103.82	195.01	204.18	213.32	0.33465
45	8	85	2	29.56	4125.03	4125.72	4126.41	130.37	139.00	147.61	0.33465
46	8	86	2	29.15	4170.64	4171.33	4172.02	259.95	267.28	274.70	0.33077
46	8	87	2	28.94	4193.63	4194.33	4195.03	169.10	177.92	186.76	0.33462
46	8	87	2	28.73	4216.79	4217.49	4218.19	101.57	110.84	120.16	0.33462
47	8	89	2	28.31	4263.52	4264.24	4264.96	321.49	329.67	337.84	0.33209
47	8	89	2	28.10	4287.13	4287.85	4288.57	235.94	244.40	252.89	0.33209
47	8	90	2	27.89	4310.86	4311.58	4312.31	140.26	146.93	153.54	0.33582
48	8	91	2	27.47	4358.78	4359.51	4360.24	267.29	275.13	282.94	0.33212
48	8	91	2	27.26	4382.96	4383.69	4384.43	156.68	163.96	171.27	0.33212
48	8	92	2	27.05	4407.30	4408.04	4408.78	51.02	58.99	66.95	0.33577
50	8	128	2	23.18	4883.14	4884.18	4885.21	81.51	91.99	102.39	0.49805
50	8	129	2	22.92	4916.83	4917.87	4918.91	58.74	69.14	79.60	0.50195
51	8	132	2	20.61	5226.23	5227.30	5228.36	350.61	0.83	11.01	0.49811
51	8	133	2	20.36	5261.17	5262.24	5263.31	304.58	313.96	323.36	0.50189
54	8	131	2	16.96	5753.99	5755.04	5756.10	104.95	114.76	124.57	0.51172
54	8	125	2	16.75	5786.06	5787.06	5788.07	43.81	53.39	63.01	0.48828
55	8	118	2	14.78	6093.59	6094.54	6095.49	78.56	87.43	96.28	0.50000
55	8	118	2	14.58	6124.64	6125.59	6126.54	17.16	26.64	36.12	0.50000
56	8	124	2	12.82	6412.21	6413.21	6414.21	120.41	129.84	139.28	0.50000
56	8	124	2	12.62	6444.86	6445.86	6446.86	58.95	67.66	76.40	0.50000
57	8	130	2	10.86	6747.21	6748.25	6749.30	18.20	26.73	35.29	0.49808
57	8	131	2	10.66	6781.51	6782.57	6783.62	302.05	310.45	318.80	0.50192

58	8	136	2	8.89	7097.53	7098.62	7099.72	326.02	333.79	341.56	0.50000
58	8	136	2	8.69	7133.48	7134.57	7135.67	246.31	255.10	263.87	0.50000
59	8	141	2	7.31	7389.32	7390.46	7391.60	343.73	352.02	0.36	0.50000
59	8	141	2	7.11	7426.32	7427.46	7428.60	249.96	258.29	266.64	0.50000
60	8	146	2	5.54	7728.50	7729.67	7730.85	335.54	343.78	352.03	0.50000
60	8	146	2	5.34	7766.73	7767.91	7769.08	233.81	241.71	249.66	0.50000

For the ULIS, the instrument collected data in 4 regions as given below:

cycle	region	samp.t.	# reads	altitude	ULIS Azimuth for Each Region			az start	az center	az end	weights
					mt start	mt center	mt end				
1	8	1	10	142.14	147.78	147.82	147.86	78.49	77.31	76.13	0.01515
1	8	1	10	142.13	147.94	147.99	148.03	73.76	72.58	71.39	0.01515
1	8	1	10	142.12	148.11	148.15	148.19	69.03	67.85	66.66	0.01515
1	8	1	10	142.11	148.27	148.31	148.35	64.30	63.12	61.93	0.01515
1	1	1	10	142.08	148.90	148.94	148.99	45.63	44.45	43.27	0.01515
1	1	1	10	142.07	149.07	149.11	149.15	40.91	39.73	38.55	0.01515
1	1	1	10	142.06	149.23	149.27	149.31	36.19	35.01	33.84	0.01515
1	1	1	10	142.05	149.39	149.43	149.47	31.48	30.30	29.12	0.01515
1	8	1	12	141.66	157.01	157.06	157.11	170.87	169.48	168.09	0.01515
1	8	1	12	141.65	157.20	157.25	157.30	165.32	163.93	162.55	0.01515
1	8	1	12	141.64	157.40	157.44	157.49	159.77	158.39	157.00	0.01515
1	8	1	12	141.63	157.59	157.64	157.69	154.23	152.85	151.46	0.01515
1	1	1	12	141.60	158.16	158.21	158.26	137.85	136.47	135.08	0.01515
1	1	1	12	141.59	158.36	158.40	158.45	132.32	130.94	129.55	0.01515
1	1	1	12	141.58	158.55	158.60	158.65	126.79	125.41	124.03	0.01515
1	1	1	12	141.57	158.74	158.79	158.84	121.26	119.88	118.50	0.01515
1	8	1	10	141.17	166.59	166.63	166.67	259.40	258.27	257.14	0.01515
1	8	1	10	141.16	166.75	166.79	166.83	254.88	253.76	252.63	0.01515
1	8	1	10	141.15	166.91	166.95	166.99	250.37	249.24	248.12	0.01515
1	8	1	10	141.14	167.07	167.11	167.15	245.86	244.73	243.60	0.01515

1	8	1	10	141.13	167.23	167.27	167.31	241.35	240.22	239.10	0.01515
1	1	1	10	141.10	167.78	167.82	167.86	226.03	224.90	223.78	0.01515
1	1	1	10	141.10	167.94	167.98	168.02	221.53	220.40	219.28	0.01515
1	1	1	10	141.09	168.11	168.15	168.19	217.03	215.90	214.78	0.01515
1	1	1	10	141.08	168.27	168.31	168.35	212.53	211.41	210.28	0.01515
1	1	1	10	141.07	168.43	168.47	168.51	208.03	206.91	205.78	0.01515
1	8	1	10	140.66	176.53	176.57	176.61	344.30	343.20	342.10	0.01515
1	8	1	10	140.65	176.69	176.73	176.77	339.89	338.79	337.69	0.01515
1	8	1	10	140.64	176.85	176.89	176.93	335.49	334.39	333.29	0.01515
1	8	1	10	140.63	177.02	177.06	177.10	331.08	329.98	328.88	0.01515
1	8	1	10	140.62	177.18	177.22	177.26	326.68	325.58	324.48	0.01515
1	1	1	10	140.59	177.76	177.80	177.84	310.84	309.74	308.65	0.01515
1	1	1	10	140.59	177.92	177.96	178.00	306.45	305.35	304.25	0.01515
1	1	1	10	140.58	178.08	178.12	178.16	302.05	300.96	299.86	0.01515
1	1	1	10	140.57	178.24	178.28	178.32	297.66	296.56	295.47	0.01515
1	1	1	10	140.56	178.40	178.44	178.48	293.27	292.17	291.08	0.01515
1	8	1	10	140.14	186.77	186.81	186.85	68.08	67.01	65.94	0.01515
1	8	1	10	140.13	186.93	186.97	187.01	63.79	62.71	61.64	0.01515
1	8	1	10	140.12	187.09	187.13	187.17	59.49	58.42	57.35	0.01515
1	8	1	10	140.11	187.25	187.29	187.33	55.20	54.13	53.06	0.01515
1	8	1	10	140.10	187.41	187.45	187.49	50.91	49.84	48.77	0.01515
1	1	1	10	140.07	188.04	188.08	188.12	34.20	33.13	32.06	0.01515
1	1	1	10	140.06	188.20	188.24	188.28	29.92	28.85	27.78	0.01515
1	1	1	10	140.06	188.36	188.40	188.44	25.64	24.57	23.50	0.01515
1	1	1	10	140.05	188.52	188.56	188.60	21.37	20.30	19.23	0.01515
1	1	1	10	140.04	188.68	188.72	188.77	17.09	16.02	14.95	0.01515
1	8	1	10	139.61	197.17	197.21	197.25	154.88	153.84	152.80	0.01515
1	8	1	10	139.60	197.33	197.37	197.41	150.71	149.67	148.63	0.01515
1	8	1	10	139.60	197.49	197.53	197.57	146.54	145.50	144.46	0.01515
1	8	1	10	139.59	197.65	197.69	197.73	142.38	141.34	140.29	0.01515
1	8	1	10	139.58	197.81	197.85	197.89	138.21	137.17	136.13	0.01515
1	1	1	10	139.55	198.46	198.50	198.54	121.57	120.53	119.49	0.01515

1	1	1	10	139.54	198.62	198.66	198.70	117.41	116.37	115.33	0.01515
1	1	1	10	139.53	198.78	198.82	198.86	113.26	112.22	111.18	0.01515
1	1	1	10	139.52	198.94	198.98	199.02	109.10	108.07	107.03	0.01515
1	1	1	10	139.51	199.10	199.14	199.18	104.95	103.92	102.88	0.01515
1	8	1	10	139.07	208.05	208.09	208.13	237.87	236.86	235.85	0.01515
1	8	1	10	139.06	208.22	208.26	208.30	233.84	232.83	231.82	0.01515
1	8	1	10	139.05	208.38	208.42	208.46	229.81	228.80	227.79	0.01515
1	8	1	10	139.04	208.54	208.58	208.62	225.78	224.77	223.77	0.01515
1	8	1	10	139.03	208.70	208.74	208.78	221.75	220.75	219.74	0.01515
1	1	1	10	139.00	209.39	209.43	209.47	204.46	203.46	202.46	0.01515
1	1	1	10	138.99	209.55	209.59	209.63	200.45	199.45	198.44	0.01515
1	1	1	10	138.98	209.72	209.76	209.80	196.44	195.43	194.43	0.01515
1	1	1	10	138.98	209.88	209.92	209.96	192.43	191.42	190.42	0.01515
1	1	1	10	138.97	210.04	210.08	210.12	188.42	187.42	186.42	0.01515
2	8	16	2	135.06	290.60	290.73	290.86	210.09	207.59	205.10	0.04665
2	8	16	2	135.03	291.12	291.25	291.37	200.11	197.62	195.14	0.04665
2	1	16	2	134.98	292.26	292.39	292.52	178.07	175.59	173.12	0.04665
2	1	16	2	134.95	292.78	292.91	293.04	168.17	165.70	163.23	0.04665
2	8	21	2	134.68	298.65	298.82	298.99	57.16	54.01	50.86	0.06122
2	8	21	2	134.64	299.33	299.50	299.67	44.57	41.43	38.29	0.06122
2	1	21	2	134.57	300.88	301.05	301.22	15.94	12.83	9.72	0.06122
2	1	21	2	134.54	301.56	301.73	301.90	3.50	0.39	357.29	0.06122
2	8	20	2	133.65	320.74	320.90	321.06	29.69	27.05	24.40	0.05831
2	8	20	2	133.62	321.39	321.55	321.71	19.12	16.48	13.85	0.05831
2	8	20	2	133.59	322.03	322.19	322.35	8.59	5.96	3.34	0.05831
2	1	21	2	133.52	323.54	323.71	323.88	344.13	341.40	338.67	0.06122
2	1	21	2	133.48	324.22	324.39	324.56	333.22	330.49	327.78	0.06122
2	1	21	2	133.45	324.89	325.06	325.23	322.35	319.64	316.93	0.06122
2	8	18	2	132.90	336.84	336.98	337.13	138.37	136.22	134.08	0.05248
2	8	18	2	132.88	337.42	337.56	337.71	129.79	127.65	125.51	0.05248
2	1	18	2	132.82	338.76	338.91	339.05	110.00	107.88	105.76	0.05248
2	1	18	2	132.79	339.35	339.49	339.64	101.53	99.42	97.31	0.05248

3	1	23	2	128.47	436.63	436.81	437.00	143.69	142.34	141.00	0.04883
3	1	23	2	128.43	437.37	437.55	437.74	138.32	136.99	135.65	0.04883
3	1	23	2	128.40	438.11	438.29	438.48	132.99	131.67	130.35	0.04883
3	8	23	2	127.53	458.50	458.69	458.87	3.83	2.81	1.79	0.04883
3	8	23	2	127.50	459.25	459.43	459.62	359.75	358.74	357.73	0.04883
3	8	23	2	127.47	459.99	460.17	460.36	355.71	354.71	353.72	0.04883
3	1	23	2	127.40	461.62	461.81	461.99	346.99	346.02	345.05	0.04883
3	1	23	2	127.37	462.37	462.55	462.74	343.11	342.15	341.18	0.04883
3	1	23	2	127.34	463.11	463.29	463.48	339.27	338.31	337.36	0.04883
3	8	21	2	126.48	483.57	483.74	483.91	249.75	249.14	248.53	0.04459
3	8	21	2	126.45	484.25	484.42	484.59	247.32	246.71	246.11	0.04459
3	8	21	2	126.42	484.93	485.10	485.27	244.91	244.31	243.72	0.04459
3	8	21	2	126.40	485.61	485.78	485.94	242.53	241.94	241.35	0.04459
3	1	21	2	126.33	487.15	487.32	487.49	237.25	236.68	236.11	0.04459
3	1	21	2	126.30	487.82	487.99	488.16	234.98	234.42	233.86	0.04459
3	1	21	2	126.27	488.50	488.67	488.84	232.75	232.19	231.64	0.04459
3	1	21	2	126.25	489.18	489.35	489.52	230.54	230.00	229.45	0.04459
3	8	24	2	125.05	518.10	518.30	518.49	164.95	164.69	164.43	0.05096
3	8	24	2	125.02	518.88	519.07	519.27	163.92	163.67	163.41	0.05096
3	8	24	2	124.99	519.65	519.85	520.04	162.91	162.66	162.42	0.05096
3	8	24	2	124.96	520.43	520.62	520.81	161.94	161.71	161.48	0.05096
4	8	23	2	123.50	556.41	556.60	556.78	155.39	155.55	155.71	0.04656
4	8	23	2	123.47	557.15	557.34	557.52	156.04	156.20	156.37	0.04656
4	8	23	2	123.44	557.89	558.08	558.27	156.72	156.89	157.07	0.04656
4	8	23	2	123.41	558.64	558.82	559.01	157.43	157.61	157.80	0.04656
4	8	23	2	123.38	559.38	559.56	559.75	158.18	158.37	158.57	0.04656
4	1	23	2	123.31	561.10	561.28	561.47	160.03	160.24	160.45	0.04656
4	1	23	2	123.28	561.84	562.02	562.21	160.88	161.09	161.31	0.04656
4	1	23	2	123.26	562.58	562.77	562.95	161.76	161.99	162.21	0.04656
4	1	23	2	123.23	563.32	563.51	563.69	162.68	162.91	163.15	0.04656
4	1	23	2	123.20	564.06	564.25	564.43	163.63	163.87	164.12	0.04656
4	8	22	2	121.73	601.20	601.38	601.56	252.56	253.18	253.80	0.04453

4	8	22	2	121.70	601.91	602.09	602.27	255.05	255.67	256.30	0.04453
4	8	22	2	121.67	602.62	602.80	602.98	257.57	258.20	258.84	0.04453
4	8	22	2	121.65	603.33	603.51	603.69	260.12	260.76	261.41	0.04453
4	8	22	2	121.62	604.04	604.22	604.40	262.71	263.35	264.01	0.04453
4	8	22	2	121.59	604.75	604.93	605.11	265.31	265.97	266.63	0.04453
4	1	22	2	121.52	606.56	606.74	606.91	272.08	272.75	273.42	0.04453
4	1	22	2	121.49	607.27	607.45	607.62	274.78	275.46	276.14	0.04453
4	1	22	2	121.46	607.98	608.16	608.33	277.51	278.20	278.89	0.04453
4	1	22	2	121.44	608.69	608.87	609.04	280.27	280.96	281.66	0.04453
4	1	22	2	121.41	609.40	609.57	609.75	283.06	283.76	284.46	0.04453
4	1	22	2	121.38	610.11	610.28	610.46	285.87	286.58	287.29	0.04453
8	8	21	2	113.15	834.22	834.39	834.55	300.18	302.76	305.34	0.05512
8	8	21	2	113.13	834.89	835.06	835.23	310.51	313.09	315.68	0.05512
8	8	21	2	113.10	835.57	835.74	835.91	320.86	323.45	326.04	0.05512
8	1	20	2	113.05	837.13	837.29	837.45	344.72	347.20	349.69	0.05249
8	1	20	2	113.03	837.77	837.93	838.09	354.66	357.14	359.63	0.05249
8	1	20	2	113.01	838.42	838.58	838.74	4.61	7.10	9.59	0.05249
8	8	22	2	112.27	859.88	860.05	860.23	346.55	349.46	352.38	0.05774
8	8	22	2	112.25	860.59	860.76	860.94	358.22	1.14	4.06	0.05774
8	8	22	2	112.22	861.30	861.47	861.65	9.92	12.85	15.78	0.05774
8	1	22	2	112.17	862.94	863.12	863.29	37.11	40.05	42.99	0.05774
8	1	22	2	112.14	863.65	863.83	864.00	48.87	51.82	54.76	0.05774
8	1	22	2	112.12	864.36	864.54	864.71	60.66	63.61	66.56	0.05774
8	8	21	2	111.51	882.43	882.60	882.77	8.60	11.55	14.51	0.05512
8	8	21	2	111.49	883.11	883.28	883.45	20.43	23.39	26.35	0.05512
8	8	21	2	111.47	883.79	883.96	884.12	32.28	35.25	38.22	0.05512
8	1	21	2	111.41	885.32	885.49	885.66	59.17	62.14	65.12	0.05512
8	1	21	2	111.39	886.00	886.16	886.33	71.09	74.07	77.06	0.05512
8	1	21	2	111.37	886.67	886.84	887.01	83.03	86.03	89.02	0.05512
9	8	20	2	107.67	959.04	959.20	959.36	119.92	123.81	127.69	0.05391
9	8	20	2	107.62	959.68	959.84	960.00	135.48	139.38	143.29	0.05391
9	1	20	2	107.52	961.12	961.28	961.44	170.43	174.38	178.34	0.05391

9	1	20	2	107.48	961.76	961.92	962.09	186.28	190.26	194.24	0.05391
9	8	19	2	106.51	975.34	975.50	975.65	181.87	186.07	190.28	0.05121
9	8	19	2	106.46	975.96	976.11	976.26	198.72	202.94	207.17	0.05121
9	1	19	2	106.36	977.37	977.53	977.68	237.97	242.22	246.48	0.05121
9	1	19	2	106.32	977.99	978.14	978.29	255.01	259.28	263.56	0.05121
9	8	18	2	106.00	982.37	982.52	982.66	19.10	23.27	27.44	0.04852
9	8	18	2	105.96	982.96	983.10	983.25	35.81	40.00	44.19	0.04852
9	1	18	2	105.86	984.30	984.45	984.59	74.85	79.08	83.32	0.04852
9	1	18	2	105.81	984.88	985.03	985.17	91.82	96.07	100.33	0.04852
9	8	21	2	105.28	992.08	992.24	992.41	308.73	313.98	319.24	0.05660
9	1	20	2	105.18	993.53	993.69	993.85	353.95	359.00	4.06	0.05391
9	8	21	2	104.37	1004.53	1004.70	1004.86	347.60	353.18	358.76	0.05660
9	1	21	2	104.26	1006.00	1006.17	1006.34	36.32	41.92	47.53	0.05660
9	8	15	2	103.51	1016.24	1016.36	1016.49	20.94	25.08	29.21	0.04043
9	8	15	2	103.47	1016.73	1016.85	1016.97	37.49	41.63	45.76	0.04043
9	1	15	2	103.39	1017.87	1017.99	1018.11	76.72	80.87	85.03	0.04043
9	1	15	2	103.35	1018.36	1018.48	1018.60	93.34	97.49	101.65	0.04043
10	8	19	2	101.03	1050.43	1050.58	1050.74	159.46	165.15	170.84	0.06909
10	1	19	2	100.93	1051.77	1051.92	1052.07	209.23	214.94	220.65	0.06909
10	8	19	2	100.28	1060.94	1061.09	1061.24	194.83	200.68	206.54	0.06909
10	1	19	2	100.19	1062.25	1062.40	1062.56	245.09	250.97	256.84	0.06909
10	8	18	2	99.57	1070.98	1071.12	1071.27	223.49	229.20	234.90	0.06545
10	1	18	2	99.49	1072.25	1072.40	1072.54	273.65	279.38	285.11	0.06545
10	8	17	2	98.90	1080.69	1080.83	1080.97	250.95	256.50	262.06	0.06182
10	1	17	2	98.81	1081.93	1082.06	1082.20	300.99	306.56	312.14	0.06182
10	8	17	2	98.73	1083.17	1083.31	1083.44	351.58	357.19	2.79	0.06182
10	1	17	2	98.65	1084.36	1084.50	1084.64	40.42	46.04	51.66	0.06182
10	8	16	2	98.16	1091.38	1091.51	1091.64	331.44	336.85	342.27	0.05818
10	1	17	2	98.08	1092.53	1092.67	1092.81	19.94	25.72	31.50	0.06182
10	8	16	2	97.55	1100.42	1100.55	1100.68	356.80	2.39	7.97	0.05818
10	1	16	2	97.47	1101.56	1101.68	1101.81	46.11	51.71	57.32	0.05818
10	8	15	2	96.95	1109.24	1109.36	1109.48	23.97	29.35	34.74	0.05455

10	1	15	2	96.88	1110.34	1110.47	1110.59	73.20	78.60	84.01	0.05455
11	8	14	2	94.76	1142.51	1142.62	1142.73	135.99	141.50	147.01	0.06009
11	1	14	2	94.70	1143.51	1143.62	1143.73	184.84	190.36	195.89	0.06009
11	8	14	2	94.25	1150.41	1150.52	1150.63	165.47	171.08	176.70	0.06009
11	1	14	2	94.19	1151.40	1151.51	1151.63	214.91	220.55	226.18	0.06009
11	8	13	2	93.76	1158.19	1158.30	1158.40	196.74	202.06	207.39	0.05579
11	1	13	2	93.70	1159.17	1159.27	1159.38	246.33	251.66	257.00	0.05579
11	8	13	2	93.58	1161.03	1161.13	1161.24	341.32	346.68	352.04	0.05579
11	1	13	2	93.52	1161.97	1162.08	1162.18	29.59	34.96	40.33	0.05579
11	8	13	2	93.12	1168.31	1168.42	1168.52	356.60	2.05	7.51	0.05579
11	1	13	2	93.06	1169.26	1169.37	1169.47	46.11	51.58	57.05	0.05579
11	8	13	2	92.66	1175.65	1175.75	1175.86	21.26	26.81	32.35	0.05579
11	1	13	2	92.60	1176.58	1176.68	1176.79	70.35	75.90	81.46	0.05579
11	8	13	2	92.21	1182.95	1183.05	1183.16	50.52	56.16	61.81	0.05579
11	1	12	2	92.15	1183.88	1183.98	1184.08	100.91	106.13	111.35	0.05150
11	8	12	2	91.77	1190.04	1190.13	1190.23	75.42	80.72	86.03	0.05150
11	1	12	2	91.72	1190.92	1191.02	1191.12	124.08	129.40	134.71	0.05150
11	8	12	2	91.35	1196.95	1197.05	1197.15	97.83	103.22	108.61	0.05150
11	1	12	2	91.30	1197.83	1197.93	1198.03	146.86	152.26	157.66	0.05150
12	8	10	2	89.25	1232.29	1232.37	1232.45	329.73	334.45	339.17	0.02525
12	1	10	2	89.20	1233.06	1233.14	1233.22	15.06	19.78	24.51	0.02525
12	8	21	2	88.89	1238.33	1238.50	1238.67	323.94	333.86	343.77	0.05303
12	1	21	2	88.85	1239.08	1239.25	1239.42	7.84	17.76	27.67	0.05303
12	8	21	2	88.54	1244.30	1244.47	1244.64	312.95	322.84	332.73	0.05303
12	1	21	2	88.50	1245.05	1245.22	1245.39	356.75	6.64	16.53	0.05303
12	8	10	2	88.19	1250.57	1250.65	1250.73	318.14	322.83	327.52	0.02525
12	1	10	2	88.14	1251.34	1251.42	1251.50	3.14	7.83	12.51	0.02525
12	8	10	2	87.84	1256.64	1256.72	1256.80	310.30	314.96	319.63	0.02525
12	1	10	2	87.80	1257.41	1257.49	1257.57	354.61	359.27	3.93	0.02525
12	8	21	2	87.49	1262.69	1262.86	1263.03	299.28	309.03	318.78	0.05303
12	1	21	2	87.45	1263.44	1263.61	1263.78	342.43	352.17	1.92	0.05303
12	8	21	2	87.15	1268.69	1268.86	1269.03	283.86	293.57	303.28	0.05303

12	1	21	2	87.11	1269.44	1269.61	1269.78	326.84	336.54	346.25	0.05303
12	8	21	2	86.82	1274.58	1274.75	1274.92	261.20	270.88	280.56	0.05303
12	1	21	2	86.78	1275.32	1275.49	1275.66	303.59	313.26	322.93	0.05303
12	8	21	2	86.50	1280.42	1280.59	1280.76	234.32	243.97	253.63	0.05303
12	1	21	2	86.46	1281.15	1281.32	1281.49	276.14	285.78	295.43	0.05303
12	8	21	2	86.18	1286.24	1286.41	1286.58	205.62	215.24	224.87	0.05303
12	1	21	2	86.14	1286.97	1287.14	1287.31	246.84	256.46	266.09	0.05303
12	8	21	2	86.08	1287.92	1288.09	1288.26	300.90	310.51	320.13	0.05303
12	1	21	2	86.04	1288.65	1288.81	1288.98	342.10	351.71	1.33	0.05303
13	8	20	2	84.19	1322.93	1323.10	1323.26	118.37	127.44	136.52	0.04454
13	1	20	2	84.16	1323.64	1323.81	1323.97	158.30	167.38	176.45	0.04454
13	8	20	2	84.03	1326.10	1326.26	1326.43	296.62	305.68	314.74	0.04454
13	1	20	2	83.99	1326.82	1326.98	1327.14	336.95	346.01	355.06	0.04454
13	8	22	2	83.67	1332.95	1333.13	1333.30	320.58	330.50	340.41	0.04900
13	1	22	2	83.63	1333.72	1333.90	1334.08	3.86	13.77	23.68	0.04900
13	8	20	2	83.36	1338.93	1339.09	1339.26	294.24	303.20	312.15	0.04454
13	1	20	2	83.32	1339.64	1339.80	1339.97	333.65	342.60	351.55	0.04454
13	8	20	2	83.06	1344.64	1344.80	1344.96	250.32	259.21	268.10	0.04454
13	1	20	2	83.02	1345.36	1345.52	1345.68	289.87	298.75	307.62	0.04454
13	8	20	2	82.76	1350.36	1350.52	1350.68	203.93	212.73	221.52	0.04454
13	1	20	2	82.73	1351.07	1351.23	1351.39	242.62	251.41	260.19	0.04454
13	8	20	2	82.47	1356.07	1356.23	1356.39	153.56	162.25	170.93	0.04454
13	1	20	2	82.44	1356.79	1356.95	1357.11	192.19	200.86	209.53	0.04454
13	8	21	2	82.18	1361.86	1362.03	1362.20	103.22	112.21	121.20	0.04677
13	1	20	2	82.14	1362.58	1362.75	1362.91	141.70	150.23	158.76	0.04454
13	8	20	2	81.89	1367.63	1367.79	1367.96	47.13	55.54	63.95	0.04454
13	1	20	2	81.85	1368.35	1368.51	1368.67	84.56	92.96	101.35	0.04454
13	8	21	2	81.59	1373.45	1373.62	1373.79	348.02	356.71	5.41	0.04677
13	1	21	2	81.56	1374.17	1374.34	1374.51	25.24	33.91	42.58	0.04677
13	8	21	2	81.30	1379.28	1379.45	1379.62	284.72	293.27	301.81	0.04677
13	1	21	2	81.27	1380.00	1380.17	1380.34	321.31	329.84	338.37	0.04677
14	8	13	2	79.82	1409.58	1409.69	1409.79	326.60	331.63	336.65	0.03163

14	1	13	2	79.77	1410.54	1410.65	1410.75	12.52	17.54	22.55	0.03163
14	8	12	2	79.48	1416.72	1416.82	1416.91	307.53	312.15	316.76	0.02920
14	1	13	2	79.44	1417.61	1417.72	1417.82	350.21	355.21	0.20	0.03163
14	8	22	2	79.22	1422.13	1422.31	1422.48	205.30	213.74	222.18	0.05353
14	1	22	2	79.18	1422.90	1423.07	1423.25	241.75	250.19	258.63	0.05353
14	8	22	2	78.93	1428.26	1428.44	1428.61	136.63	145.05	153.47	0.05353
14	1	22	2	78.89	1429.02	1429.19	1429.37	172.61	181.02	189.44	0.05353
14	8	22	2	78.63	1434.49	1434.67	1434.85	72.09	80.48	88.87	0.05353
14	1	22	2	78.60	1435.27	1435.44	1435.62	108.70	117.08	125.47	0.05353
14	8	22	2	78.34	1440.77	1440.94	1441.12	8.18	16.52	24.86	0.05353
14	1	22	2	78.30	1441.55	1441.73	1441.90	44.96	53.30	61.63	0.05353
14	8	23	2	78.05	1447.06	1447.25	1447.43	303.44	312.11	320.77	0.05596
14	1	23	2	78.01	1447.85	1448.04	1448.22	340.33	348.99	357.64	0.05596
14	8	23	2	77.75	1453.38	1453.56	1453.75	236.96	245.53	254.11	0.05596
14	1	23	2	77.72	1454.17	1454.35	1454.54	273.48	282.05	290.62	0.05596
14	8	23	2	77.46	1459.80	1459.98	1460.17	172.22	180.71	189.18	0.05596
14	1	23	2	77.42	1460.59	1460.78	1460.97	208.68	217.15	225.60	0.05596
14	8	23	2	77.17	1466.30	1466.48	1466.67	107.52	115.89	124.26	0.05596
14	1	23	2	77.13	1467.10	1467.29	1467.47	143.88	152.23	160.58	0.05596
15	8	16	2	73.98	1539.63	1539.76	1539.89	329.23	334.45	339.67	0.07512
15	1	16	2	73.94	1540.75	1540.88	1541.01	14.59	19.80	25.03	0.07512
15	8	13	2	73.72	1545.91	1546.01	1546.12	222.87	227.09	231.30	0.06103
15	1	12	2	73.69	1546.84	1546.94	1547.04	260.39	264.26	268.13	0.05634
15	8	13	2	73.42	1553.34	1553.44	1553.55	157.52	161.63	165.74	0.06103
15	1	13	2	73.38	1554.26	1554.37	1554.47	193.84	197.94	202.04	0.06103
15	8	13	2	73.11	1560.75	1560.85	1560.96	83.78	87.76	91.73	0.06103
15	1	13	2	73.08	1561.67	1561.78	1561.88	118.89	122.86	126.82	0.06103
15	8	13	2	72.81	1568.29	1568.39	1568.50	4.89	8.74	12.58	0.06103
15	1	13	2	72.77	1569.23	1569.34	1569.44	39.45	43.29	47.12	0.06103
15	8	13	2	72.50	1575.92	1576.02	1576.13	283.56	287.36	291.15	0.06103
15	1	13	2	72.46	1576.87	1576.97	1577.08	317.86	321.63	325.40	0.06103
15	8	13	2	72.19	1583.66	1583.77	1583.87	199.55	203.27	206.99	0.06103

15	1	13	2	72.15	1584.62	1584.73	1584.83	233.52	237.23	240.93	0.06103
15	8	13	2	71.88	1591.50	1591.61	1591.71	114.34	118.00	121.65	0.06103
15	1	13	2	71.84	1592.48	1592.58	1592.69	148.34	152.00	155.65	0.06103
16	8	14	2	70.53	1626.46	1626.57	1626.68	264.54	268.50	272.47	0.06731
16	1	14	2	70.49	1627.50	1627.61	1627.72	301.05	305.01	308.98	0.06731
16	8	15	2	70.22	1634.89	1635.01	1635.13	200.04	204.28	208.52	0.07212
16	1	15	2	70.18	1635.95	1636.07	1636.19	237.02	241.25	245.47	0.07212
16	8	15	2	69.90	1643.45	1643.58	1643.70	135.81	139.98	144.15	0.07212
16	1	15	2	69.86	1644.53	1644.65	1644.77	172.77	176.93	181.12	0.07212
16	8	15	2	69.59	1652.03	1652.15	1652.27	72.95	77.16	81.36	0.07212
16	1	15	2	69.55	1653.10	1653.22	1653.34	110.18	114.37	118.56	0.07212
16	8	15	2	69.27	1660.78	1660.90	1661.03	10.46	14.38	18.29	0.07212
16	1	15	2	69.23	1661.87	1661.99	1662.11	45.46	49.33	53.22	0.07212
16	8	15	2	68.96	1669.48	1669.60	1669.72	291.39	295.31	299.23	0.07212
16	1	15	2	68.92	1670.57	1670.69	1670.81	326.66	330.58	334.50	0.07212
16	8	15	2	68.64	1678.36	1678.48	1678.61	219.83	223.77	227.71	0.07212
16	1	15	2	68.61	1679.46	1679.58	1679.70	255.56	259.51	263.45	0.07212
17	8	16	2	67.36	1715.44	1715.57	1715.70	352.43	356.61	0.78	0.06809
17	1	17	2	67.32	1716.60	1716.73	1716.87	29.67	34.10	38.51	0.07234
17	8	17	2	67.05	1724.80	1724.93	1725.07	289.51	293.73	297.95	0.07234
17	1	16	2	67.01	1725.99	1726.12	1726.25	326.10	330.04	333.97	0.06809
17	8	16	2	66.74	1734.19	1734.32	1734.45	213.23	217.12	221.01	0.06809
17	1	17	2	66.70	1735.35	1735.48	1735.62	248.08	252.23	256.38	0.07234
17	8	17	2	66.43	1743.77	1743.91	1744.05	148.32	152.57	156.81	0.07234
17	1	17	2	66.39	1744.96	1745.09	1745.23	185.04	189.29	193.54	0.07234
17	8	17	2	66.12	1753.30	1753.43	1753.57	75.83	79.85	83.88	0.07234
17	1	17	2	66.09	1754.48	1754.62	1754.76	110.60	114.62	118.65	0.07234
17	8	17	2	65.82	1763.09	1763.23	1763.37	1.41	5.38	9.35	0.07234
17	1	17	2	65.78	1764.30	1764.44	1764.58	36.39	40.35	44.31	0.07234
17	8	17	2	65.51	1773.02	1773.16	1773.29	284.66	288.55	292.44	0.07234
17	1	17	2	65.47	1774.25	1774.38	1774.52	319.46	323.35	327.24	0.07234
18	8	18	2	64.53	1805.27	1805.42	1805.56	134.76	138.91	143.06	0.08108

18	1	18	2	64.49	1806.56	1806.71	1806.85	171.69	175.85	180.01	0.08108
18	8	18	2	64.22	1815.62	1815.76	1815.91	67.74	71.80	75.86	0.08108
18	1	18	2	64.19	1816.91	1817.05	1817.20	103.90	107.98	112.06	0.08108
18	8	18	2	63.92	1825.96	1826.11	1826.25	0.24	4.39	8.54	0.08108
18	1	18	2	63.89	1827.25	1827.40	1827.54	37.14	41.29	45.44	0.08108
18	8	19	2	63.62	1836.61	1836.76	1836.91	302.46	306.78	311.11	0.08559
18	1	19	2	63.58	1837.92	1838.08	1838.23	339.58	343.91	348.23	0.08559
18	8	19	2	63.32	1847.41	1847.57	1847.72	244.50	248.72	252.94	0.08559
18	1	19	2	63.28	1848.75	1848.91	1849.06	281.25	285.44	289.63	0.08559
18	8	19	2	63.01	1858.43	1858.58	1858.73	184.41	188.63	192.86	0.08559
18	1	19	2	62.98	1859.79	1859.94	1860.10	222.02	226.26	230.50	0.08559
22	8	26	2	59.12	2011.94	2012.15	2012.36	330.07	335.32	340.57	0.11159
22	1	26	2	59.08	2013.72	2013.93	2014.14	14.32	19.51	24.71	0.11159
22	8	23	2	58.82	2024.76	2024.95	2025.13	287.91	292.52	297.14	0.09871
22	1	23	2	58.79	2026.33	2026.51	2026.70	326.83	331.45	336.07	0.09871
22	8	22	2	58.53	2037.29	2037.46	2037.64	242.40	246.91	251.42	0.09442
22	1	23	2	58.50	2038.83	2039.01	2039.20	281.63	286.37	291.12	0.09871
22	8	22	2	58.25	2049.79	2049.96	2050.14	199.51	203.87	208.26	0.09442
22	1	23	2	58.21	2051.33	2051.51	2051.70	237.64	242.25	246.85	0.09871
22	8	22	2	57.96	2062.29	2062.46	2062.64	156.63	161.14	165.66	0.09442
22	1	23	2	57.93	2063.83	2064.01	2064.20	195.80	200.51	205.22	0.09871
23	8	23	2	57.11	2100.50	2100.69	2100.87	10.03	14.43	18.83	0.08303
23	1	23	2	57.08	2102.09	2102.27	2102.46	47.59	51.97	56.34	0.08303
23	8	23	2	56.84	2113.26	2113.45	2113.64	307.90	312.20	316.51	0.08303
23	1	23	2	56.80	2114.86	2115.05	2115.23	344.90	349.20	353.50	0.08303
23	8	23	2	56.55	2126.72	2126.90	2127.09	263.01	267.36	271.71	0.08303
23	1	23	2	56.51	2128.31	2128.50	2128.68	300.42	304.76	309.09	0.08303
23	8	23	2	56.27	2139.49	2139.67	2139.86	200.71	205.04	209.36	0.08303
23	1	23	2	56.24	2141.08	2141.26	2141.45	237.67	241.97	246.28	0.08303
23	8	22	2	56.20	2142.67	2142.84	2143.02	274.48	278.60	282.71	0.07942
23	1	23	2	56.17	2144.20	2144.38	2144.57	309.90	314.20	318.49	0.08303
23	8	24	2	55.93	2155.60	2155.79	2155.99	205.72	209.88	214.05	0.08664

23	1	24	2	55.90	2157.23	2157.42	2157.62	240.88	245.06	249.24	0.08664
24	8	25	2	54.28	2236.25	2236.45	2236.65	60.89	64.70	68.52	0.07862
24	1	25	2	54.25	2237.99	2238.19	2238.39	93.90	97.71	101.54	0.07862
24	8	26	2	54.00	2250.53	2250.74	2250.95	330.33	334.20	338.08	0.08176
24	1	26	2	53.97	2252.31	2252.52	2252.73	3.21	7.08	10.95	0.08176
24	8	26	2	53.72	2264.82	2265.03	2265.24	236.65	240.60	244.53	0.08176
24	1	26	2	53.69	2266.60	2266.81	2267.02	270.12	274.05	277.98	0.08176
24	8	27	2	53.43	2279.66	2279.87	2280.09	155.92	160.12	164.33	0.08491
24	1	27	2	53.40	2281.49	2281.70	2281.92	191.20	195.39	199.58	0.08491
24	8	27	2	53.14	2294.86	2295.08	2295.30	80.12	84.08	88.06	0.08491
24	1	27	2	53.11	2296.74	2296.95	2297.17	114.17	118.13	122.09	0.08491
24	8	28	2	52.96	2304.30	2304.52	2304.75	250.54	254.53	258.52	0.08805
24	1	28	2	52.92	2306.23	2306.45	2306.68	284.48	288.41	292.35	0.08805
25	8	29	2	52.57	2324.85	2325.08	2325.32	242.00	246.00	250.01	0.12185
25	1	29	2	52.54	2326.82	2327.06	2327.29	276.06	280.13	284.21	0.12185
25	8	29	2	52.28	2340.64	2340.87	2341.11	159.31	163.37	167.41	0.12185
25	1	29	2	52.24	2342.61	2342.85	2343.08	193.43	197.45	201.47	0.12185
25	8	30	2	51.97	2357.03	2357.27	2357.52	75.89	79.87	83.84	0.12605
25	1	30	2	51.94	2359.06	2359.30	2359.54	109.06	113.03	116.98	0.12605
25	8	31	2	51.67	2373.78	2374.03	2374.28	344.70	348.61	352.53	0.13025
25	1	31	2	51.63	2375.86	2376.11	2376.36	17.22	21.12	25.02	0.13025
26	1	31	2	51.01	2410.28	2410.53	2410.78	194.68	198.67	202.66	0.12016
26	8	32	2	50.74	2425.26	2425.51	2425.77	74.06	78.19	82.32	0.12403
26	1	32	2	50.71	2427.40	2427.66	2427.92	108.45	112.59	116.75	0.12403
26	8	33	2	50.43	2443.17	2443.44	2443.71	1.46	5.71	9.96	0.12791
26	1	32	2	50.39	2445.40	2445.66	2445.92	36.90	40.99	45.08	0.12403
26	8	32	2	50.12	2460.84	2461.10	2461.36	274.75	278.59	282.43	0.12403
26	1	33	2	50.08	2463.03	2463.29	2463.56	307.13	311.03	314.93	0.12791
26	8	33	2	49.82	2478.47	2478.74	2479.00	174.79	178.79	182.80	0.12791
30	8	65	2	47.47	2620.26	2620.78	2621.30	247.24	255.42	263.62	0.15439
30	1	64	2	47.43	2622.40	2622.92	2623.43	280.85	289.00	297.17	0.15202
30	8	64	2	47.20	2637.40	2637.92	2638.43	158.67	166.77	174.85	0.15202

30	1	32	2	47.17	2639.27	2639.53	2639.79	187.95	191.98	196.01	0.07601
30	8	65	2	46.93	2654.54	2655.06	2655.58	62.70	70.66	78.61	0.15439
30	1	32	2	46.90	2656.41	2656.67	2656.93	91.21	95.12	99.02	0.07601
30	8	66	2	46.65	2672.32	2672.86	2673.39	328.91	336.71	344.49	0.15677
30	1	33	2	46.63	2674.25	2674.52	2674.78	357.09	0.97	4.86	0.07838
31	8	68	2	45.99	2715.37	2715.92	2716.47	274.45	283.49	292.54	0.11765
31	1	69	2	45.96	2717.64	2718.20	2718.75	311.79	320.93	330.05	0.11938
31	8	67	2	45.72	2733.03	2733.57	2734.12	199.35	207.87	216.37	0.11592
31	1	66	2	45.69	2735.24	2735.78	2736.31	234.16	242.54	250.93	0.11419
31	8	74	2	45.64	2738.82	2739.41	2740.01	290.41	299.75	309.07	0.12803
31	1	73	2	45.60	2741.24	2741.83	2742.42	328.35	337.54	346.73	0.12630
31	8	80	2	45.30	2761.30	2761.94	2762.59	287.69	298.24	308.82	0.13841
31	1	81	2	45.26	2763.95	2764.60	2765.26	331.23	342.02	352.80	0.14014
32	1	64	2	44.81	2794.90	2795.41	2795.93	133.95	142.95	151.97	0.12774
32	8	63	2	44.59	2809.50	2810.01	2810.52	26.99	35.67	44.32	0.12575
32	1	63	2	44.56	2811.59	2812.10	2812.60	62.50	71.08	79.63	0.12575
32	8	63	2	44.35	2826.17	2826.68	2827.18	302.98	311.43	319.90	0.12575
32	1	63	2	44.32	2828.25	2828.76	2829.26	337.66	346.14	354.63	0.12575
32	8	61	2	44.12	2842.17	2842.66	2843.15	209.11	217.21	225.29	0.12176
32	1	61	2	44.09	2844.19	2844.68	2845.18	242.31	250.32	258.31	0.12176
32	8	63	2	43.88	2859.17	2859.67	2860.18	120.03	127.89	135.73	0.12575
33	8	84	2	43.38	2894.45	2895.13	2895.81	308.85	319.36	329.88	0.21053
33	1	85	2	43.34	2897.23	2897.92	2898.60	352.03	2.69	13.36	0.21303
33	8	48	2	43.02	2920.19	2920.58	2920.97	2.75	9.27	15.81	0.12030
33	1	49	2	42.98	2923.42	2923.81	2924.21	57.13	63.79	70.43	0.12281
33	8	66	2	42.80	2936.56	2937.09	2937.63	276.11	284.60	293.04	0.16541
33	1	67	2	42.77	2938.76	2939.30	2939.84	310.94	319.39	327.83	0.16792
34	8	66	2	42.08	2989.32	2989.86	2990.39	350.36	358.94	7.54	0.11301
34	1	67	2	42.05	2991.53	2992.07	2992.61	25.97	34.77	43.55	0.11473
34	8	67	2	41.84	3007.26	3007.80	3008.34	285.79	294.66	303.55	0.11473
34	1	67	2	41.81	3009.47	3010.01	3010.55	322.11	330.98	339.85	0.11473
34	8	65	2	41.61	3024.43	3024.95	3025.48	205.18	213.60	222.00	0.11130

34	1	64	2	41.58	3026.57	3027.09	3027.60	239.56	247.82	256.07	0.10959
34	8	9	2	41.57	3028.27	3028.35	3028.42	266.78	267.93	269.09	0.01541
34	1	60	2	41.55	3029.03	3029.52	3030.00	278.87	286.58	294.29	0.10274
34	8	60	2	41.37	3042.89	3043.38	3043.86	138.31	145.96	153.62	0.10274
34	1	59	2	41.34	3044.88	3045.35	3045.83	169.69	177.23	184.78	0.10103
35	1	61	2	40.42	3115.97	3116.47	3116.96	179.57	186.72	193.89	0.12323
35	8	62	2	40.24	3130.28	3130.78	3131.28	29.02	36.36	43.68	0.12525
35	1	61	2	40.22	3132.33	3132.82	3133.31	59.02	66.23	73.43	0.12323
35	8	62	2	40.03	3146.81	3147.31	3147.81	269.23	275.92	282.54	0.12525
35	1	62	2	40.01	3148.87	3149.37	3149.87	296.33	302.78	309.18	0.12525
35	8	62	2	39.82	3163.45	3163.95	3164.45	125.01	131.97	138.94	0.12525
35	1	62	2	39.80	3165.51	3166.01	3166.51	153.89	160.94	168.00	0.12525
35	8	63	2	39.62	3180.16	3180.67	3181.18	357.01	3.91	10.80	0.12727
36	8	63	2	39.20	3213.95	3214.46	3214.97	101.93	109.02	116.09	0.12281
36	1	64	2	39.17	3216.06	3216.57	3217.09	131.25	138.43	145.62	0.12476
36	8	64	2	38.99	3230.97	3231.48	3232.00	339.34	346.59	353.83	0.12476
36	1	64	2	38.96	3233.09	3233.60	3234.12	9.09	16.31	23.53	0.12476
36	8	64	2	38.78	3248.14	3248.65	3249.17	216.55	223.45	230.32	0.12476
36	1	64	2	38.75	3250.27	3250.79	3251.30	244.92	251.68	258.40	0.12476
36	8	65	2	38.57	3265.38	3265.90	3266.42	73.05	79.63	86.22	0.12671
36	1	65	2	38.55	3267.53	3268.05	3268.58	100.10	106.69	113.25	0.12671
37	8	66	2	38.16	3300.25	3300.78	3301.31	203.32	211.29	219.22	0.12453
37	1	66	2	38.13	3302.42	3302.96	3303.49	235.64	243.39	251.07	0.12453
37	8	66	2	37.95	3317.79	3318.32	3318.85	85.90	93.02	100.11	0.12453
37	1	66	2	37.92	3319.98	3320.51	3321.04	115.10	122.16	129.19	0.12453
37	8	66	2	37.74	3335.46	3335.99	3336.53	320.52	327.67	334.83	0.12453
37	1	66	2	37.71	3337.66	3338.20	3338.73	350.15	357.32	4.52	0.12453
37	8	67	2	37.53	3353.24	3353.78	3354.32	205.78	213.51	221.26	0.12642
37	1	67	2	37.51	3355.46	3356.00	3356.54	237.67	245.50	253.39	0.12642
38	8	68	2	37.01	3397.90	3398.44	3398.99	170.93	179.39	187.82	0.12409
38	1	68	2	36.99	3400.15	3400.69	3401.24	205.47	213.81	222.11	0.12409
38	8	68	2	36.81	3416.08	3416.63	3417.18	75.04	82.56	90.05	0.12409

38	1	68	2	36.78	3418.35	3418.89	3419.44	105.95	113.35	120.71	0.12409
38	8	69	2	36.60	3434.39	3434.94	3435.50	318.57	325.96	333.35	0.12591
38	1	69	2	36.57	3436.66	3437.22	3437.77	348.76	356.15	3.53	0.12591
38	8	69	2	36.39	3452.79	3453.34	3453.90	199.92	207.18	214.44	0.12591
38	1	69	2	36.37	3455.09	3455.64	3456.20	229.98	237.30	244.65	0.12591
39	8	70	2	35.98	3489.92	3490.49	3491.05	1.41	9.89	18.37	0.10116
39	1	70	2	35.95	3492.24	3492.80	3493.37	36.20	44.70	53.21	0.10116
39	8	70	2	35.79	3507.01	3507.58	3508.14	259.87	268.21	276.54	0.10116
39	1	71	2	35.76	3509.34	3509.91	3510.49	294.26	302.69	311.11	0.10260
39	8	71	2	35.58	3525.87	3526.45	3527.02	164.67	172.12	179.55	0.10260
39	1	71	2	35.55	3528.22	3528.79	3529.36	195.07	202.45	209.80	0.10260
39	8	54	2	35.53	3530.46	3530.90	3531.33	223.85	229.41	234.96	0.07803
39	1	71	2	35.51	3532.41	3532.99	3533.56	248.71	255.98	263.23	0.10260
39	8	72	2	35.32	3548.98	3549.56	3550.15	94.57	102.16	109.81	0.10405
39	1	72	2	35.30	3551.36	3551.94	3552.52	125.89	133.67	141.47	0.10405
40	8	72	2	35.12	3568.17	3568.75	3569.33	348.52	355.98	3.43	0.12414
40	1	72	2	35.09	3570.56	3571.14	3571.72	19.15	26.60	34.06	0.12414
40	8	72	2	34.91	3587.36	3587.94	3588.52	236.65	244.48	252.36	0.12414
40	1	72	2	34.88	3589.75	3590.33	3590.91	269.29	277.35	285.46	0.12414
40	8	73	2	34.70	3606.71	3607.30	3607.89	158.15	167.17	176.20	0.12586
40	1	73	2	34.68	3609.12	3609.71	3610.30	195.03	203.98	212.90	0.12586
40	8	73	2	34.49	3626.20	3626.79	3627.38	81.69	90.31	98.99	0.12586
40	1	73	2	34.47	3628.63	3629.22	3629.80	117.54	126.33	135.16	0.12586
41	8	74	2	34.12	3661.51	3662.11	3662.70	233.95	242.32	250.75	0.12333
41	1	74	2	34.09	3663.96	3664.56	3665.16	268.63	277.19	285.80	0.12333
41	8	75	2	33.91	3681.28	3681.89	3682.49	154.58	162.70	170.84	0.12500
41	1	75	2	33.89	3683.75	3684.36	3684.96	187.75	195.90	204.05	0.12500
41	8	75	2	33.70	3701.25	3701.85	3702.46	72.52	81.07	89.63	0.12500
41	1	75	2	33.68	3703.73	3704.34	3704.94	107.68	116.26	124.83	0.12500
41	8	76	2	33.50	3721.31	3721.93	3722.54	354.31	2.76	11.24	0.12667
41	1	76	2	33.47	3723.81	3724.43	3725.04	28.88	37.39	45.91	0.12667
42	8	78	2	32.67	3802.12	3802.75	3803.38	23.68	31.39	39.08	0.16596

42	1	78	2	32.65	3804.69	3805.31	3805.94	54.90	62.44	69.93	0.16596
42	8	78	2	32.46	3822.77	3823.40	3824.03	258.95	266.65	274.47	0.16596
42	1	78	2	32.44	3825.35	3825.98	3826.61	291.17	299.26	307.42	0.16596
42	8	79	2	32.26	3843.62	3844.26	3844.89	170.08	178.19	186.30	0.16809
42	1	79	2	32.23	3846.22	3846.85	3847.49	203.12	211.21	219.29	0.16809
43	8	80	2	31.84	3885.77	3886.42	3887.06	308.18	314.03	319.86	0.16632
43	1	80	2	31.81	3888.40	3889.05	3889.69	331.84	337.60	343.35	0.16632
43	8	80	2	31.63	3906.92	3907.56	3908.21	157.76	165.39	173.11	0.16632
43	1	80	2	31.61	3909.56	3910.21	3910.85	189.59	197.57	205.62	0.16632
43	8	81	2	31.42	3928.27	3928.92	3929.57	104.71	114.35	123.97	0.16840
43	1	80	2	31.40	3930.93	3931.58	3932.22	143.81	153.20	162.57	0.16632
44	8	82	2	30.80	3993.16	3993.82	3994.48	348.74	0.19	11.67	0.16532
44	1	82	2	30.77	3995.86	3996.52	3997.18	35.72	47.25	58.75	0.16532
44	8	83	2	30.61	4013.53	4014.20	4014.87	345.44	356.96	8.42	0.16734
44	1	83	2	30.58	4016.26	4016.93	4017.60	32.04	43.34	54.59	0.16734
44	8	83	2	30.40	4035.56	4036.23	4036.90	341.52	351.75	1.95	0.16734
44	1	83	2	30.37	4038.31	4038.98	4039.64	23.19	33.27	43.32	0.16734
45	8	84	2	29.98	4080.03	4080.71	4081.38	246.42	255.79	265.18	0.16535
45	1	84	2	29.95	4082.81	4083.49	4084.17	285.04	294.50	303.96	0.16535
45	8	85	2	29.77	4102.45	4103.13	4103.82	195.01	204.18	213.32	0.16732
45	1	85	2	29.75	4105.25	4105.93	4106.62	232.35	241.46	250.59	0.16732
45	8	85	2	29.56	4125.03	4125.72	4126.41	130.37	139.00	147.61	0.16732
45	1	85	2	29.54	4127.84	4128.53	4129.21	165.53	174.03	182.50	0.16732
46	8	86	2	29.15	4170.64	4171.33	4172.02	259.95	267.28	274.70	0.16538
46	1	86	2	29.12	4173.48	4174.18	4174.87	290.53	298.17	305.85	0.16538
46	8	87	2	28.94	4193.63	4194.33	4195.03	169.10	177.92	186.76	0.16731
46	1	87	2	28.91	4196.49	4197.19	4197.89	205.17	213.99	222.84	0.16731
46	8	87	2	28.73	4216.79	4217.49	4218.19	101.57	110.84	120.16	0.16731
46	1	87	2	28.70	4219.67	4220.37	4221.07	139.86	149.25	158.63	0.16731
47	8	89	2	28.31	4263.52	4264.24	4264.96	321.49	329.67	337.84	0.16604
47	1	89	2	28.28	4266.44	4267.16	4267.88	354.70	2.86	11.00	0.16604
47	8	89	2	28.10	4287.13	4287.85	4288.57	235.94	244.40	252.89	0.16604

47	1	89	2	28.08	4290.07	4290.78	4291.50	270.74	279.40	288.15	0.16604
47	8	90	2	27.89	4310.86	4311.58	4312.31	140.26	146.93	153.54	0.16791
47	1	90	2	27.87	4313.81	4314.53	4315.26	167.14	173.71	180.28	0.16791
48	1	90	2	27.66	4337.84	4338.57	4339.29	39.87	47.37	54.89	0.16484
48	8	91	2	27.47	4358.78	4359.51	4360.24	267.29	275.13	282.94	0.16667
48	1	91	2	27.45	4361.77	4362.50	4363.24	299.08	306.84	314.60	0.16667
48	8	91	2	27.26	4382.96	4383.69	4384.43	156.68	163.96	171.27	0.16667
48	1	91	2	27.24	4385.97	4386.70	4387.44	186.59	193.92	201.28	0.16667
48	8	92	2	27.05	4407.30	4408.04	4408.78	51.02	58.99	66.95	0.16850
50	8	128	2	23.18	4883.14	4884.18	4885.21	81.51	91.99	102.39	0.24854
50	1	129	2	23.15	4887.35	4888.39	4889.43	123.64	133.86	144.05	0.25049
50	8	129	2	22.92	4916.83	4917.87	4918.91	58.74	69.14	79.60	0.25049
50	1	129	2	22.89	4921.04	4922.08	4923.13	101.29	111.97	122.61	0.25049
51	8	132	2	20.61	5226.23	5227.30	5228.36	350.61	0.83	11.01	0.24906
51	1	132	2	20.58	5230.56	5231.62	5232.68	31.82	41.83	51.78	0.24906
51	8	133	2	20.36	5261.17	5262.24	5263.31	304.58	313.96	323.36	0.25094
51	1	133	2	20.33	5265.50	5266.58	5267.65	342.61	352.06	1.54	0.25094
54	8	131	2	16.96	5753.99	5755.04	5756.10	104.95	114.76	124.57	0.25586
54	1	131	2	16.93	5758.28	5759.33	5760.39	144.74	154.54	164.34	0.25586
54	8	125	2	16.75	5786.06	5787.06	5788.07	43.81	53.39	63.01	0.24414
54	1	125	2	16.72	5790.14	5791.15	5792.15	82.83	92.54	102.27	0.24414
55	8	118	2	14.78	6093.59	6094.54	6095.49	78.56	87.43	96.28	0.25053
55	1	117	2	14.75	6097.44	6098.38	6099.33	114.43	123.21	132.02	0.24841
55	8	118	2	14.58	6124.64	6125.59	6126.54	17.16	26.64	36.12	0.25053
55	1	118	2	14.56	6128.50	6129.46	6130.41	55.66	65.07	74.51	0.25053
56	8	124	2	12.82	6412.21	6413.21	6414.21	120.41	129.84	139.28	0.25000
56	1	124	2	12.80	6416.28	6417.28	6418.28	158.75	168.21	177.67	0.25000
56	8	124	2	12.62	6444.86	6445.86	6446.86	58.95	67.66	76.40	0.25000
56	1	124	2	12.60	6448.93	6449.93	6450.93	94.48	103.21	111.91	0.25000
57	8	130	2	10.86	6747.21	6748.25	6749.30	18.20	26.73	35.29	0.24904
57	1	130	2	10.83	6751.47	6752.52	6753.57	53.06	61.70	70.37	0.24904
57	8	131	2	10.66	6781.51	6782.57	6783.62	302.05	310.45	318.80	0.25096

57	1	131	2	10.63	6785.79	6786.85	6787.90	335.93	344.22	352.49	0.25096
58	1	135	2	9.06	7066.43	7067.51	7068.60	99.79	107.89	115.96	0.24862
58	8	136	2	8.89	7097.53	7098.62	7099.72	326.02	333.79	341.56	0.25046
58	1	136	2	8.86	7101.97	7103.07	7104.16	357.64	5.52	13.45	0.25046
58	8	136	2	8.69	7133.48	7134.57	7135.67	246.31	255.10	263.87	0.25046
59	8	141	2	7.31	7389.32	7390.46	7391.60	343.73	352.02	0.36	0.25000
59	1	141	2	7.28	7393.94	7395.07	7396.21	17.44	25.71	33.96	0.25000
59	8	141	2	7.11	7426.32	7427.46	7428.60	249.96	258.29	266.64	0.25000
59	1	141	2	7.09	7430.93	7432.07	7433.21	283.94	292.38	300.82	0.25000
60	8	146	2	5.54	7728.50	7729.67	7730.85	335.54	343.78	352.03	0.25000
60	1	146	2	5.51	7733.25	7734.43	7735.61	8.84	17.05	25.20	0.25000
60	8	146	2	5.34	7766.73	7767.91	7769.08	233.81	241.71	249.66	0.25000
60	1	146	2	5.32	7771.50	7772.68	7773.86	266.06	274.03	282.04	0.25000
1	7	1	10	142.17	147.11	147.15	147.19	98.39	97.21	96.02	0.03571
1	7	1	10	142.17	147.27	147.31	147.35	93.65	92.47	91.28	0.03571
1	2	1	10	142.02	150.10	150.14	150.18	10.74	9.57	8.39	0.03571
1	2	1	10	142.01	150.26	150.30	150.34	6.04	4.86	3.69	0.03571
1	7	1	10	141.69	156.38	156.42	156.46	188.92	187.76	186.60	0.03571
1	7	1	10	141.68	156.54	156.58	156.62	184.29	183.13	181.97	0.03571
1	2	1	10	141.53	159.48	159.52	159.56	100.34	99.19	98.04	0.03571
1	2	1	10	141.52	159.64	159.68	159.72	95.74	94.59	93.44	0.03571
1	7	1	10	141.20	165.96	166.00	166.04	277.03	275.90	274.77	0.03571
1	7	1	10	141.19	166.12	166.16	166.20	272.50	271.37	270.24	0.03571
1	2	1	10	141.03	169.17	169.21	169.25	187.37	186.25	185.12	0.03571
1	2	1	10	141.03	169.33	169.37	169.41	182.88	181.76	180.64	0.03571
1	7	1	10	140.69	175.86	175.90	175.94	2.61	1.51	0.40	0.03571
1	7	1	10	140.68	176.02	176.06	176.10	358.20	357.09	355.99	0.03571
1	2	1	12	140.52	179.11	179.16	179.21	273.97	272.65	271.34	0.03571
1	2	1	12	140.51	179.31	179.35	179.40	268.71	267.40	266.08	0.03571
1	7	1	12	140.17	186.03	186.08	186.13	87.65	86.36	85.07	0.03571
1	7	1	12	140.16	186.22	186.27	186.32	82.49	81.20	79.91	0.03571

1	2	1	12	140.00	189.38	189.43	189.47	358.73	357.45	356.17	0.03571
1	2	1	12	139.99	189.57	189.62	189.67	353.61	352.33	351.05	0.03571
1	7	1	12	139.65	196.41	196.46	196.51	174.52	173.26	172.01	0.03571
1	7	1	12	139.64	196.60	196.65	196.70	169.50	168.25	166.99	0.03571
1	2	1	12	139.47	199.97	200.01	200.06	82.77	81.53	80.29	0.03571
1	2	1	12	139.46	200.16	200.21	200.26	77.81	76.57	75.33	0.03571
1	7	1	12	139.11	207.26	207.30	207.35	257.86	256.64	255.43	0.03571
1	7	1	12	139.10	207.45	207.50	207.55	253.01	251.79	250.58	0.03571
1	2	1	12	138.93	210.87	210.92	210.97	167.81	166.61	165.42	0.03571
1	2	1	12	138.92	211.06	211.11	211.16	163.02	161.82	160.62	0.03571
2	7	13	2	135.10	289.65	289.75	289.86	228.54	226.51	224.47	0.12621
2	7	17	2	134.74	297.37	297.51	297.65	81.12	78.55	75.98	0.16505
2	2	20	2	134.39	304.73	304.89	305.05	305.83	302.93	300.02	0.19417
2	7	22	2	133.72	319.19	319.36	319.54	55.39	52.45	49.51	0.21359
2	7	15	2	132.96	335.72	335.85	335.97	154.90	153.10	151.30	0.14563
2	2	16	2	132.71	341.00	341.13	341.26	77.60	75.75	73.90	0.15534
3	2	16	2	128.34	439.74	439.87	440.00	121.46	120.56	119.65	0.08421
3	2	16	2	128.31	440.25	440.38	440.51	117.85	116.95	116.06	0.08421
3	7	16	2	127.61	456.74	456.87	457.00	13.70	12.97	12.24	0.08421
3	7	16	2	127.59	457.25	457.38	457.51	10.79	10.07	9.35	0.08421
3	7	19	2	126.56	481.59	481.74	481.90	257.06	256.48	255.91	0.10000
3	7	19	2	126.54	482.20	482.36	482.51	254.77	254.20	253.64	0.10000
3	2	22	2	126.08	493.07	493.25	493.43	218.50	217.98	217.46	0.11579
3	2	22	2	126.05	493.78	493.96	494.14	216.42	215.90	215.39	0.11579
3	7	22	2	125.15	515.75	515.93	516.10	168.28	168.01	167.75	0.11579
3	7	22	2	125.12	516.46	516.64	516.81	167.23	166.98	166.73	0.11579
4	2	18	2	124.64	528.30	528.45	528.59	154.21	154.10	153.99	0.07595
4	2	18	2	124.62	528.88	529.03	529.17	153.78	153.67	153.57	0.07595
4	2	18	2	124.59	529.46	529.61	529.75	153.37	153.27	153.17	0.07595
4	7	19	2	123.61	553.76	553.91	554.06	153.36	153.47	153.59	0.08017
4	7	19	2	123.59	554.37	554.52	554.68	153.81	153.92	154.03	0.08017
4	7	19	2	123.56	554.98	555.14	555.29	154.26	154.38	154.49	0.08017

4	2	21	2	123.00	569.05	569.21	569.38	170.79	171.06	171.33	0.08861
4	2	21	2	122.97	569.72	569.89	570.06	171.88	172.15	172.43	0.08861
4	2	21	2	122.94	570.40	570.57	570.74	173.00	173.28	173.57	0.08861
4	7	21	2	121.85	598.20	598.37	598.54	242.35	242.91	243.47	0.08861
4	7	21	2	121.82	598.88	599.05	599.22	244.61	245.18	245.75	0.08861
4	7	21	2	121.79	599.56	599.73	599.90	246.90	247.47	248.05	0.08861
8	7	15	2	113.21	832.58	832.70	832.82	275.31	277.14	278.98	0.09091
8	7	15	2	113.19	833.06	833.18	833.30	282.65	284.48	286.32	0.09091
8	2	16	2	112.90	841.39	841.52	841.65	50.74	52.75	54.75	0.09697
8	2	16	2	112.89	841.91	842.04	842.17	58.78	60.79	62.80	0.09697
8	7	16	2	112.33	858.10	858.23	858.36	317.49	319.60	321.71	0.09697
8	7	16	2	112.32	858.62	858.75	858.88	325.93	328.05	330.16	0.09697
8	2	22	2	112.06	865.96	866.14	866.32	87.42	90.39	93.35	0.13333
8	7	15	2	111.57	880.79	880.91	881.03	339.94	342.04	344.15	0.09091
8	7	15	2	111.55	881.27	881.39	881.51	348.36	350.46	352.57	0.09091
8	2	19	2	111.32	888.20	888.36	888.51	110.15	112.86	115.58	0.11515
9	2	15	2	107.38	963.17	963.30	963.42	221.33	224.35	227.38	0.12821
9	7	16	2	106.60	974.17	974.29	974.42	149.66	153.18	156.70	0.13675
9	7	15	2	106.08	981.26	981.38	981.50	347.26	350.71	354.16	0.12821
9	7	11	2	105.35	991.20	991.29	991.37	281.58	284.32	287.05	0.09402
9	2	11	2	105.04	995.49	995.58	995.67	55.85	58.66	61.47	0.09402
9	7	11	2	104.44	1003.62	1003.71	1003.80	317.93	320.84	323.75	0.09402
9	7	12	2	103.58	1015.31	1015.40	1015.50	349.02	352.32	355.62	0.10256
9	2	14	2	103.27	1019.48	1019.59	1019.70	131.91	135.80	139.69	0.11966
9	7	12	2	102.69	1027.45	1027.55	1027.65	49.56	52.96	56.37	0.10256
10	7	21	2	101.08	1049.70	1049.86	1050.03	132.25	138.52	144.80	0.09677
10	2	18	2	100.84	1053.11	1053.26	1053.40	259.47	264.90	270.33	0.08295
10	7	21	2	100.33	1060.22	1060.39	1060.56	167.46	173.92	180.37	0.09677
10	2	12	2	100.10	1063.55	1063.65	1063.74	294.91	298.62	302.34	0.05530
10	7	20	2	99.62	1070.28	1070.44	1070.61	196.27	202.60	208.93	0.09217
10	2	12	2	99.40	1073.49	1073.59	1073.69	322.72	326.54	330.38	0.05530
10	7	19	2	98.94	1080.01	1080.16	1080.31	223.24	229.43	235.63	0.08756

10	7	18	2	98.21	1090.73	1090.87	1091.02	304.04	310.12	316.21	0.08295
10	2	13	2	98.00	1093.72	1093.83	1093.93	70.35	74.79	79.23	0.05991
10	7	18	2	97.59	1099.80	1099.94	1100.09	329.96	336.23	342.50	0.08295
10	2	14	2	97.39	1102.70	1102.81	1102.93	95.94	100.86	105.79	0.06452
10	7	17	2	96.99	1108.63	1108.76	1108.90	356.72	2.82	8.91	0.07834
10	2	14	2	96.81	1111.43	1111.55	1111.66	121.88	126.94	132.00	0.06452
11	7	15	2	94.80	1141.96	1142.08	1142.20	109.25	115.15	121.04	0.07143
11	2	14	2	94.63	1144.53	1144.64	1144.76	235.01	240.55	246.09	0.06667
11	7	15	2	94.29	1149.88	1150.00	1150.12	138.98	145.00	151.02	0.07143
11	2	12	2	94.13	1152.41	1152.51	1152.60	265.29	270.12	274.97	0.05714
11	7	15	2	93.79	1157.64	1157.76	1157.88	168.92	175.06	181.19	0.07143
11	7	14	2	93.61	1160.50	1160.62	1160.73	314.55	320.31	326.07	0.06667
11	2	4	2	93.47	1162.87	1162.90	1162.93	75.49	77.14	78.80	0.01905
11	7	14	2	93.15	1167.79	1167.90	1168.01	329.39	335.25	341.11	0.06667
11	2	10	2	93.00	1170.21	1170.29	1170.37	95.33	99.53	103.74	0.04762
11	7	14	2	92.69	1175.15	1175.26	1175.38	354.85	0.81	6.77	0.06667
11	2	12	2	92.54	1177.53	1177.63	1177.72	120.81	125.95	131.09	0.05714
11	7	14	2	92.24	1182.45	1182.56	1182.67	23.63	29.70	35.77	0.06667
11	2	10	2	92.10	1184.76	1184.84	1184.92	148.38	152.74	157.09	0.04762
11	7	14	2	91.80	1189.54	1189.65	1189.76	48.06	54.23	60.41	0.06667
11	2	10	2	91.67	1191.81	1191.89	1191.97	172.85	177.30	181.73	0.04762
11	7	13	2	91.38	1196.48	1196.58	1196.69	71.33	77.17	83.01	0.06190
11	2	10	2	91.25	1198.71	1198.79	1198.87	195.99	200.50	205.02	0.04762
12	7	12	2	89.27	1231.84	1231.94	1232.04	303.76	309.42	315.09	0.05797
12	2	7	2	89.16	1233.82	1233.87	1233.93	59.44	62.75	66.06	0.03382
12	7	11	2	88.92	1237.83	1237.92	1238.01	294.66	299.85	305.05	0.05314
12	2	10	2	88.81	1239.76	1239.84	1239.92	47.49	52.21	56.92	0.04831
12	7	11	2	88.58	1243.80	1243.89	1243.98	283.74	288.93	294.11	0.05314
12	2	11	2	88.46	1245.93	1246.02	1246.11	48.05	53.23	58.41	0.05314
12	7	11	2	88.21	1250.13	1250.22	1250.31	292.81	297.97	303.13	0.05314
12	2	9	2	88.10	1252.10	1252.17	1252.24	47.20	51.42	55.64	0.04348
12	7	11	2	87.86	1256.21	1256.30	1256.39	285.58	290.71	295.84	0.05314

12	2	9	2	87.75	1258.16	1258.24	1258.31	38.42	42.61	46.81	0.04348
12	7	11	2	87.52	1262.19	1262.28	1262.36	270.49	275.60	280.71	0.05314
12	2	10	2	87.42	1264.12	1264.20	1264.28	21.85	26.48	31.12	0.04831
12	7	11	2	87.19	1268.19	1268.28	1268.36	255.19	260.28	265.37	0.05314
12	2	8	2	87.08	1270.11	1270.17	1270.24	5.18	8.87	12.57	0.03865
12	7	11	2	86.86	1274.08	1274.17	1274.26	232.62	237.69	242.77	0.05314
12	2	8	2	86.75	1275.99	1276.06	1276.12	341.81	345.49	349.17	0.03865
12	7	11	2	86.53	1279.93	1280.02	1280.11	206.28	211.34	216.40	0.05314
12	2	9	2	86.43	1281.83	1281.90	1281.98	314.71	318.85	322.98	0.04348
12	7	11	2	86.21	1285.75	1285.84	1285.93	177.65	182.70	187.74	0.05314
12	7	4	2	86.11	1287.60	1287.63	1287.66	282.58	284.41	286.24	0.01932
12	2	11	2	85.99	1289.77	1289.85	1289.94	45.69	50.73	55.76	0.05314
13	2	10	2	84.43	1318.58	1318.66	1318.74	233.14	237.68	242.22	0.04566
13	7	11	2	84.22	1322.45	1322.54	1322.63	91.11	96.11	101.11	0.05023
13	7	10	2	84.06	1325.63	1325.71	1325.79	269.87	274.40	278.93	0.04566
13	2	11	2	83.92	1328.18	1328.26	1328.35	53.03	58.01	62.99	0.05023
13	7	12	2	83.70	1332.43	1332.52	1332.62	291.26	296.66	302.08	0.05479
13	2	10	2	83.59	1334.57	1334.65	1334.73	51.16	55.66	60.16	0.04566
13	7	10	2	83.39	1338.45	1338.53	1338.61	267.33	271.82	276.30	0.04566
13	2	10	2	83.29	1340.30	1340.38	1340.46	9.91	14.38	18.85	0.04566
13	7	10	2	83.09	1344.17	1344.25	1344.33	224.08	228.53	232.97	0.04566
13	2	10	2	82.99	1346.01	1346.09	1346.17	325.82	330.25	334.69	0.04566
13	7	11	2	82.79	1349.88	1349.96	1350.05	177.50	182.35	187.20	0.05023
13	2	10	2	82.70	1351.72	1351.80	1351.88	278.20	282.58	286.97	0.04566
13	7	10	2	82.50	1355.59	1355.67	1355.75	127.90	132.25	136.60	0.04566
13	2	10	2	82.41	1357.46	1357.54	1357.62	228.15	232.48	236.81	0.04566
13	7	11	2	82.21	1361.38	1361.46	1361.55	77.51	82.23	86.94	0.05023
13	2	10	2	82.11	1363.24	1363.32	1363.40	176.25	180.51	184.78	0.04566
13	7	11	2	81.91	1367.15	1367.24	1367.33	21.84	26.47	31.11	0.05023
13	2	10	2	81.82	1369.01	1369.09	1369.17	118.97	123.16	127.35	0.04566
13	7	11	2	81.62	1372.96	1373.05	1373.14	323.16	327.73	332.28	0.05023
13	2	10	2	81.53	1374.85	1374.93	1375.01	59.89	64.02	68.13	0.04566

13	7	11	2	81.33	1378.79	1378.87	1378.96	259.87	264.35	268.84	0.05023
14	7	14	2	79.85	1409.06	1409.17	1409.28	301.51	306.91	312.31	0.06512
14	2	5	2	79.73	1411.44	1411.48	1411.52	55.33	57.26	59.18	0.02326
14	7	14	2	79.50	1416.20	1416.32	1416.43	282.92	288.31	293.68	0.06512
14	7	11	2	79.24	1421.63	1421.72	1421.81	181.49	185.72	189.94	0.05116
14	2	10	2	79.15	1423.61	1423.69	1423.77	275.51	279.34	283.17	0.04651
14	7	11	2	78.95	1427.75	1427.84	1427.93	112.49	116.70	120.92	0.05116
14	2	11	2	78.86	1429.77	1429.85	1429.94	208.18	212.40	216.61	0.05116
14	7	11	2	78.66	1433.98	1434.06	1434.15	47.66	51.86	56.06	0.05116
14	2	11	2	78.57	1436.00	1436.09	1436.18	143.38	147.57	151.76	0.05116
14	7	12	2	78.37	1440.24	1440.34	1440.44	343.50	348.06	352.61	0.05581
14	2	11	2	78.27	1442.26	1442.35	1442.44	78.31	82.48	86.65	0.05116
14	7	12	2	78.07	1446.54	1446.64	1446.73	278.96	283.48	288.00	0.05581
14	2	10	2	77.98	1448.59	1448.67	1448.75	14.55	18.31	22.07	0.04651
14	7	12	2	77.78	1452.85	1452.95	1453.05	212.70	217.17	221.65	0.05581
14	2	12	2	77.69	1454.93	1455.02	1455.12	308.48	312.94	317.41	0.05581
14	7	12	2	77.49	1459.26	1459.36	1459.46	147.88	152.30	156.73	0.05581
14	2	12	2	77.39	1461.37	1461.47	1461.56	243.98	248.39	252.80	0.05581
14	7	12	2	77.20	1465.76	1465.85	1465.95	83.11	87.49	91.85	0.05581
14	2	12	2	77.10	1467.86	1467.96	1468.05	177.99	182.34	186.69	0.05581
15	2	17	2	74.26	1532.94	1533.08	1533.22	58.74	64.30	69.86	0.07798
15	7	17	2	74.01	1539.02	1539.16	1539.30	304.77	310.31	315.86	0.07798
15	7	14	2	73.74	1545.41	1545.52	1545.64	202.75	207.29	211.83	0.06422
15	2	14	2	73.65	1547.80	1547.92	1548.03	298.76	303.27	307.78	0.06422
15	7	14	2	73.44	1552.84	1552.96	1553.07	138.22	142.65	147.08	0.06422
15	2	13	2	73.34	1555.23	1555.34	1555.44	231.63	235.73	239.81	0.05963
15	7	14	2	73.13	1560.25	1560.36	1560.47	64.78	69.07	73.36	0.06422
15	2	14	2	73.04	1562.67	1562.79	1562.90	156.57	160.81	165.05	0.06422
15	7	14	2	72.83	1567.78	1567.89	1568.00	346.22	350.37	354.52	0.06422
15	2	14	2	72.73	1570.23	1570.34	1570.46	75.99	80.12	84.25	0.06422
15	7	14	2	72.52	1575.39	1575.50	1575.62	264.53	268.63	272.73	0.06422
15	2	14	2	72.42	1577.90	1578.01	1578.13	354.83	358.85	2.88	0.06422

15	7	15	2	72.21	1583.12	1583.25	1583.37	180.39	184.68	188.97	0.06881
15	2	15	2	72.11	1585.66	1585.78	1585.90	269.96	274.22	278.49	0.06881
15	7	15	2	71.90	1590.95	1591.08	1591.20	95.23	99.45	103.66	0.06881
16	7	16	2	70.55	1625.87	1626.00	1626.13	244.14	248.68	253.21	0.06897
16	2	16	2	70.45	1628.58	1628.70	1628.83	338.94	343.46	347.99	0.06897
16	7	16	2	70.24	1634.32	1634.45	1634.58	180.00	184.52	189.03	0.06897
16	2	16	2	70.14	1637.04	1637.17	1637.30	275.22	279.70	284.18	0.06897
16	7	17	2	69.92	1642.87	1643.00	1643.14	115.54	120.26	124.98	0.07328
16	2	16	2	69.82	1645.62	1645.75	1645.88	210.60	215.05	219.51	0.06897
16	7	17	2	69.61	1651.44	1651.57	1651.71	52.40	57.19	61.98	0.07328
16	2	17	2	69.50	1654.27	1654.41	1654.54	150.66	155.41	160.16	0.07328
16	7	17	2	69.29	1660.18	1660.32	1660.45	350.82	355.30	359.75	0.07328
16	2	16	2	69.19	1662.98	1663.11	1663.24	81.02	85.17	89.32	0.06897
16	7	17	2	68.98	1668.87	1669.01	1669.15	271.79	276.23	280.67	0.07328
16	2	17	2	68.88	1671.74	1671.88	1672.02	4.80	9.24	13.69	0.07328
16	7	17	2	68.66	1677.75	1677.89	1678.02	199.88	204.34	208.81	0.07328
16	2	17	2	68.56	1680.71	1680.85	1680.98	296.30	300.78	305.25	0.07328
17	7	18	2	67.39	1714.79	1714.94	1715.08	331.29	335.99	340.69	0.06977
17	2	17	2	67.28	1717.81	1717.95	1718.09	68.83	73.24	77.63	0.06589
17	7	18	2	67.07	1724.17	1724.31	1724.46	270.05	274.55	279.04	0.06977
17	2	18	2	66.97	1727.17	1727.31	1727.46	1.84	6.22	10.59	0.06977
17	7	18	2	66.76	1733.54	1733.68	1733.83	193.58	197.94	202.30	0.06977
17	2	18	2	66.66	1736.64	1736.79	1736.93	287.55	291.99	296.44	0.06977
17	7	19	2	66.45	1743.12	1743.27	1743.43	128.11	132.86	137.60	0.07364
17	2	18	2	66.35	1746.18	1746.33	1746.47	222.98	227.44	231.90	0.06977
17	7	19	2	66.14	1752.64	1752.80	1752.95	56.65	61.16	65.66	0.07364
17	2	19	2	66.04	1755.84	1756.00	1756.15	150.56	155.04	159.53	0.07364
17	7	19	2	65.84	1762.42	1762.58	1762.73	342.02	346.46	350.90	0.07364
17	2	19	2	65.73	1765.65	1765.80	1765.96	75.19	79.59	84.00	0.07364
17	7	19	2	65.53	1772.33	1772.49	1772.64	265.23	269.58	273.92	0.07364
17	2	19	2	65.43	1775.58	1775.73	1775.88	357.20	1.55	5.90	0.07364
18	7	20	2	64.55	1804.55	1804.71	1804.88	114.28	118.88	123.47	0.08032

18	2	20	2	64.45	1807.87	1808.03	1808.19	209.17	213.80	218.42	0.08032
18	7	20	2	64.24	1814.90	1815.06	1815.22	47.69	52.20	56.70	0.08032
18	2	20	2	64.15	1818.21	1818.37	1818.53	140.42	144.96	149.50	0.08032
18	7	21	2	63.94	1825.24	1825.41	1825.58	339.46	344.31	349.15	0.08434
18	2	20	2	63.84	1828.74	1828.90	1829.06	79.53	84.13	88.72	0.08032
18	7	21	2	63.64	1835.89	1836.06	1836.23	282.20	286.98	291.76	0.08434
18	2	21	2	63.54	1839.39	1839.56	1839.73	20.98	25.75	30.52	0.08434
18	7	21	2	63.34	1846.68	1846.85	1847.02	224.27	228.94	233.61	0.08434
18	2	21	2	63.24	1850.25	1850.42	1850.59	322.08	326.67	331.26	0.08434
18	7	22	2	63.03	1857.67	1857.85	1858.02	163.53	168.41	173.30	0.08835
18	2	22	2	62.93	1861.36	1861.54	1861.72	265.53	270.45	275.36	0.08835
22	7	29	2	59.15	2010.97	2011.20	2011.43	305.51	311.43	317.32	0.11694
22	2	22	2	59.04	2015.49	2015.67	2015.84	58.30	62.69	67.08	0.08871
22	7	25	2	58.84	2023.92	2024.12	2024.32	266.89	271.89	276.89	0.10081
22	2	24	2	58.75	2027.94	2028.13	2028.33	7.03	11.85	16.69	0.09677
22	7	25	2	58.55	2036.42	2036.63	2036.83	220.49	225.61	230.72	0.10081
22	2	24	2	58.46	2040.44	2040.63	2040.83	322.97	327.95	332.93	0.09677
22	7	25	2	58.27	2048.92	2049.12	2049.33	178.26	183.22	188.20	0.10081
22	2	24	2	58.17	2052.94	2053.13	2053.33	277.95	282.83	287.71	0.09677
22	7	25	2	57.98	2061.42	2061.62	2061.83	134.66	139.80	144.93	0.10081
22	2	25	2	57.89	2065.45	2065.66	2065.86	237.12	242.22	247.32	0.10081
23	7	26	2	57.13	2099.62	2099.83	2100.04	349.16	354.14	359.12	0.10156
23	2	25	2	57.04	2103.71	2103.91	2104.11	85.76	90.49	95.23	0.09766
23	7	26	2	56.85	2112.39	2112.60	2112.81	287.51	292.37	297.24	0.10156
23	2	25	2	56.75	2117.16	2117.36	2117.56	38.18	42.87	47.55	0.09766
23	7	26	2	56.56	2125.84	2126.05	2126.26	242.30	247.26	252.20	0.10156
23	2	25	2	56.48	2129.93	2130.14	2130.34	338.22	342.91	347.60	0.09766
23	7	26	2	56.29	2138.61	2138.82	2139.03	180.22	185.11	190.00	0.10156
23	2	26	2	56.14	2145.84	2146.05	2146.26	347.95	352.79	357.63	0.10156
23	7	26	2	55.95	2154.72	2154.93	2155.14	186.70	191.24	195.79	0.10156
23	2	25	2	55.86	2158.91	2159.11	2159.31	277.10	281.45	285.81	0.09766
24	7	28	2	54.30	2235.29	2235.51	2235.74	42.66	46.94	51.23	0.08642

24	2	29	2	54.21	2239.84	2240.07	2240.30	128.94	133.37	137.81	0.08951
24	7	29	2	54.02	2249.55	2249.79	2250.02	312.25	316.59	320.92	0.08951
24	2	28	2	53.93	2254.13	2254.36	2254.58	36.84	41.01	45.18	0.08642
24	7	29	2	53.74	2263.83	2264.07	2264.30	218.17	222.57	226.96	0.08951
24	2	29	2	53.65	2268.71	2268.95	2269.18	309.63	314.00	318.36	0.08951
24	7	30	2	53.45	2278.66	2278.91	2279.15	136.81	141.47	146.12	0.09259
24	2	30	2	53.36	2283.63	2283.87	2284.11	232.34	236.97	241.57	0.09259
24	7	30	2	53.16	2293.83	2294.07	2294.32	61.30	65.71	70.12	0.09259
24	7	31	2	52.98	2303.25	2303.50	2303.75	231.89	236.35	240.80	0.09568
24	2	31	2	52.89	2308.17	2308.42	2308.67	318.19	322.50	326.81	0.09568
25	7	32	2	52.59	2323.78	2324.03	2324.29	223.69	228.07	232.48	0.12121
25	2	31	2	52.50	2328.84	2329.09	2329.34	311.41	315.82	320.25	0.11742
25	7	32	2	52.30	2339.57	2339.82	2340.08	140.71	145.19	149.67	0.12121
25	2	33	2	52.20	2344.90	2345.16	2345.43	232.56	237.11	241.64	0.12500
25	7	33	2	51.99	2355.93	2356.19	2356.46	57.71	62.10	66.48	0.12500
25	2	34	2	51.90	2361.31	2361.59	2361.86	145.86	150.30	154.75	0.12879
25	7	34	2	51.69	2372.65	2372.93	2373.20	326.99	331.30	335.60	0.12879
25	2	35	2	51.59	2378.14	2378.43	2378.71	52.75	57.13	61.51	0.13258
26	2	35	2	50.97	2412.43	2412.72	2413.00	229.05	233.57	238.07	0.12281
26	7	35	2	50.76	2424.09	2424.38	2424.66	55.48	60.01	64.52	0.12281
26	2	36	2	50.66	2429.97	2430.26	2430.55	149.79	154.46	159.13	0.12632
26	7	36	2	50.45	2441.98	2442.27	2442.56	342.37	347.02	351.66	0.12632
26	2	36	2	50.35	2447.62	2447.91	2448.20	71.89	76.45	81.00	0.12632
26	7	36	2	50.14	2459.63	2459.92	2460.21	256.62	260.99	265.34	0.12632
26	2	35	2	50.04	2465.29	2465.58	2465.86	340.26	344.37	348.47	0.12281
26	7	36	2	49.84	2477.28	2477.57	2477.86	156.87	161.22	165.57	0.12632
30	7	35	2	47.50	2618.83	2619.11	2619.39	225.04	229.43	233.81	0.12681
30	2	34	2	47.41	2624.32	2624.59	2624.87	311.25	315.62	319.98	0.12319
30	7	35	2	47.22	2635.97	2636.25	2636.54	136.26	140.69	145.13	0.12681
30	2	34	2	47.14	2641.47	2641.75	2642.02	222.29	226.55	230.82	0.12319
30	7	35	2	46.95	2653.12	2653.40	2653.68	41.17	45.45	49.74	0.12681
30	2	36	2	46.86	2658.84	2659.13	2659.42	127.92	132.31	136.69	0.13043

30	7	36	2	46.68	2670.85	2671.14	2671.43	307.27	311.52	315.79	0.13043
30	2	31	2	46.59	2676.49	2676.74	2676.99	29.77	33.41	37.06	0.11232
31	7	37	2	46.02	2713.86	2714.16	2714.46	249.23	254.22	259.19	0.16017
31	2	32	2	45.93	2719.66	2719.91	2720.17	344.83	349.04	353.24	0.13853
31	7	36	2	45.75	2731.57	2731.86	2732.15	176.18	180.77	185.36	0.15584
31	7	38	2	45.66	2737.24	2737.55	2737.86	265.67	270.51	275.34	0.16450
31	2	44	2	45.55	2745.05	2745.41	2745.76	27.85	33.41	38.96	0.19048
31	7	44	2	45.33	2759.52	2759.87	2760.23	258.66	264.42	270.19	0.19048
32	2	33	2	44.78	2796.80	2797.07	2797.33	167.19	171.84	176.49	0.12840
32	7	34	2	44.62	2808.11	2808.39	2808.66	3.24	7.94	12.65	0.13230
32	2	33	2	44.54	2813.47	2813.73	2814.00	94.09	98.52	102.96	0.12840
32	7	34	2	44.37	2824.78	2825.06	2825.33	279.92	284.46	289.02	0.13230
32	2	22	2	44.30	2830.05	2830.22	2830.40	7.70	10.66	13.62	0.08560
32	7	33	2	44.14	2840.81	2841.08	2841.34	186.73	191.13	195.52	0.12840
32	2	34	2	44.06	2846.44	2846.72	2846.99	278.78	283.21	287.63	0.13230
32	7	34	2	43.90	2857.78	2858.05	2858.33	98.46	102.75	107.01	0.13230
33	7	46	2	43.41	2892.60	2892.97	2893.34	280.09	285.84	291.60	0.21005
33	2	51	2	43.29	2901.35	2901.76	2902.17	56.21	62.66	69.14	0.23288
33	7	53	2	43.05	2918.43	2918.86	2919.29	333.11	340.30	347.50	0.24201
33	7	36	2	42.82	2935.08	2935.38	2935.67	252.34	257.05	261.73	0.16438
33	2	33	2	42.74	2940.75	2941.01	2941.28	341.87	345.98	350.11	0.15068
34	2	36	2	42.27	2975.84	2976.13	2976.42	144.78	149.02	153.27	0.13187
34	7	36	2	42.10	2987.86	2988.15	2988.44	326.86	331.49	336.13	0.13187
34	2	36	2	42.02	2993.78	2994.07	2994.36	62.75	67.48	72.21	0.13187
34	7	36	2	41.86	3005.79	3006.08	3006.37	261.58	266.37	271.17	0.13187
34	2	31	2	41.79	3011.43	3011.68	3011.93	354.26	358.36	2.46	0.11355
34	7	35	2	41.63	3023.00	3023.28	3023.56	182.22	186.76	191.32	0.12821
34	2	31	2	41.53	3030.83	3031.08	3031.33	307.49	311.44	315.41	0.11355
34	7	32	2	41.39	3041.58	3041.84	3042.09	117.49	121.57	125.66	0.11722
35	2	33	2	40.40	3117.81	3118.07	3118.34	206.22	210.10	213.98	0.12268
35	7	33	2	40.26	3128.92	3129.18	3129.45	9.01	12.92	16.83	0.12268
35	2	33	2	40.20	3134.25	3134.51	3134.78	87.13	91.04	94.95	0.12268

35	7	34	2	40.05	3145.44	3145.72	3145.99	250.53	254.31	258.08	0.12639
35	2	34	2	39.99	3150.79	3151.07	3151.34	320.98	324.45	327.92	0.12639
35	7	34	2	39.84	3162.06	3162.33	3162.61	105.91	109.67	113.43	0.12639
35	2	34	2	39.78	3167.44	3167.71	3167.99	181.12	185.00	188.90	0.12639
35	7	34	2	39.64	3178.78	3179.05	3179.33	338.17	341.89	345.62	0.12639
36	7	35	2	39.22	3212.54	3212.82	3213.11	82.27	86.20	90.14	0.12500
36	2	35	2	39.15	3218.01	3218.29	3218.57	158.41	162.33	166.26	0.12500
36	7	35	2	39.01	3229.56	3229.84	3230.12	319.54	323.49	327.46	0.12500
36	2	35	2	38.94	3235.09	3235.37	3235.65	37.02	40.96	44.88	0.12500
36	7	35	2	38.80	3246.71	3246.99	3247.27	197.31	201.13	204.94	0.12500
36	2	35	2	38.73	3252.26	3252.54	3252.82	270.70	274.31	277.91	0.12500
36	7	35	2	38.59	3263.95	3264.23	3264.51	55.24	58.75	62.25	0.12500
36	2	35	2	38.53	3269.53	3269.81	3270.09	125.16	128.68	132.21	0.12500
37	7	36	2	38.18	3298.79	3299.08	3299.37	181.27	185.67	190.06	0.12500
37	2	36	2	38.11	3304.41	3304.70	3304.99	264.23	268.35	272.45	0.12500
37	7	36	2	37.97	3316.33	3316.62	3316.91	66.32	70.21	74.11	0.12500
37	2	36	2	37.90	3322.01	3322.30	3322.59	141.96	145.78	149.61	0.12500
37	7	36	2	37.76	3333.99	3334.28	3334.57	300.82	304.71	308.59	0.12500
37	2	36	2	37.69	3339.72	3340.01	3340.30	17.97	21.92	25.86	0.12500
37	7	36	2	37.55	3351.78	3352.07	3352.36	184.92	189.03	193.16	0.12500
37	2	36	2	37.48	3357.53	3357.82	3358.11	267.98	272.28	276.59	0.12500
38	2	37	2	37.18	3384.16	3384.46	3384.76	317.89	322.53	327.18	0.12458
38	7	37	2	37.03	3396.40	3396.69	3396.99	147.69	152.32	156.94	0.12458
38	2	37	2	36.97	3402.25	3402.55	3402.85	237.28	241.74	246.19	0.12458
38	7	37	2	36.83	3414.57	3414.87	3415.17	54.23	58.37	62.49	0.12458
38	2	37	2	36.76	3420.47	3420.76	3421.06	134.40	138.37	142.34	0.12458
38	7	37	2	36.62	3432.87	3433.17	3433.47	298.43	302.40	306.35	0.12458
38	2	37	2	36.55	3438.79	3439.09	3439.38	17.00	20.95	24.91	0.12458
38	7	38	2	36.41	3451.25	3451.56	3451.87	180.01	183.99	187.97	0.12795
39	2	38	2	36.14	3475.76	3476.07	3476.38	153.48	157.90	162.30	0.14179
39	7	38	2	36.00	3488.38	3488.68	3488.99	338.21	342.80	347.38	0.14179
39	7	38	2	35.81	3505.46	3505.76	3506.07	236.71	241.28	245.85	0.14179

39	2	38	2	35.74	3511.53	3511.83	3512.14	326.36	330.85	335.32	0.14179
39	7	39	2	35.60	3524.31	3524.62	3524.94	144.18	148.32	152.45	0.14552
39	2	38	2	35.49	3534.53	3534.84	3535.15	275.50	279.32	283.13	0.14179
39	7	39	2	35.34	3547.40	3547.72	3548.03	74.14	78.17	82.22	0.14552
40	7	39	2	35.14	3566.58	3566.90	3567.21	328.11	332.16	336.20	0.12342
40	2	39	2	35.07	3572.72	3573.03	3573.35	46.92	50.97	55.02	0.12342
40	7	39	2	34.93	3585.76	3586.07	3586.39	215.38	219.53	223.71	0.12342
40	2	39	2	34.86	3591.99	3592.31	3592.62	300.71	305.17	309.64	0.12342
40	7	40	2	34.72	3605.10	3605.43	3605.75	133.63	138.54	143.48	0.12658
40	2	40	2	34.65	3611.39	3611.71	3612.03	229.29	234.12	238.93	0.12658
40	7	40	2	34.51	3624.58	3624.90	3625.22	58.19	62.84	67.50	0.12658
40	2	40	2	34.45	3630.90	3631.22	3631.55	151.63	156.48	161.32	0.12658
41	7	41	2	34.14	3659.87	3660.20	3660.53	211.01	215.60	220.20	0.13443
41	2	40	2	34.07	3666.22	3666.54	3666.87	301.25	305.94	310.64	0.13115
41	7	41	2	33.93	3679.64	3679.97	3680.30	132.40	136.86	141.32	0.13443
41	2	41	2	33.87	3686.07	3686.40	3686.74	219.09	223.59	228.09	0.13443
41	7	41	2	33.72	3699.59	3699.92	3700.25	48.96	53.66	58.35	0.13443
41	2	41	2	33.66	3706.05	3706.38	3706.71	140.52	145.20	149.88	0.13443
41	7	41	2	33.52	3719.65	3719.98	3720.31	331.37	335.94	340.50	0.13443
41	2	19	2	33.45	3725.89	3726.05	3726.20	57.84	59.99	62.13	0.06230
42	7	42	2	32.69	3800.41	3800.75	3801.09	2.48	6.70	10.90	0.16406
42	2	42	2	32.63	3807.03	3807.37	3807.71	82.69	86.62	90.53	0.16406
42	7	43	2	32.49	3821.06	3821.40	3821.75	238.50	242.57	246.65	0.16797
42	2	43	2	32.42	3827.77	3828.12	3828.47	322.68	327.28	331.89	0.16797
42	7	43	2	32.28	3841.89	3842.23	3842.58	147.97	152.40	156.82	0.16797
42	2	43	2	32.21	3848.64	3848.99	3849.34	233.92	238.32	242.72	0.16797
43	2	43	2	31.79	3890.78	3891.13	3891.47	353.06	356.15	359.25	0.16350
43	7	44	2	31.65	3905.16	3905.51	3905.87	137.36	141.43	145.52	0.16730
43	2	44	2	31.59	3912.03	3912.38	3912.74	220.57	225.14	229.73	0.16730
43	7	44	2	31.44	3926.49	3926.85	3927.20	78.41	83.74	89.03	0.16730
43	2	44	2	31.38	3933.43	3933.78	3934.14	179.99	185.09	190.17	0.16730
43	7	44	2	31.24	3947.99	3948.35	3948.70	18.43	23.16	27.93	0.16730

44	2	45	2	30.96	3976.61	3976.97	3977.33	88.85	94.33	99.78	0.19912
44	7	45	2	30.82	3991.34	3991.70	3992.07	317.64	323.82	330.03	0.19912
44	2	1	2	30.76	3997.95	3997.95	3997.96	72.06	72.20	72.33	0.00442
44	7	45	2	30.63	4011.72	4012.08	4012.44	314.08	320.36	326.65	0.19912
44	2	45	2	30.56	4018.81	4019.18	4019.54	74.93	80.96	86.98	0.19912
44	7	45	2	30.42	4033.73	4034.10	4034.46	313.36	318.96	324.55	0.19912
45	7	46	2	30.00	4078.17	4078.55	4078.92	220.91	226.01	231.11	0.16547
45	2	46	2	29.93	4085.40	4085.77	4086.14	321.26	326.46	331.68	0.16547
45	7	46	2	29.79	4100.59	4100.96	4101.33	170.14	175.12	180.10	0.16547
45	2	46	2	29.72	4107.87	4108.25	4108.62	267.31	272.24	277.19	0.16547
45	7	47	2	29.58	4123.16	4123.53	4123.91	106.61	111.42	116.22	0.16906
45	2	47	2	29.52	4130.49	4130.86	4131.24	198.14	202.76	207.37	0.16906
46	7	47	2	29.17	4168.74	4169.12	4169.50	240.39	244.24	248.13	0.16491
46	2	47	2	29.10	4176.15	4176.52	4176.90	320.13	324.42	328.73	0.16491
46	7	47	2	28.96	4191.73	4192.10	4192.48	145.28	150.02	154.74	0.16491
46	2	48	2	28.89	4199.18	4199.57	4199.96	239.05	243.90	248.74	0.16842
46	7	48	2	28.75	4214.86	4215.25	4215.63	76.41	81.44	86.46	0.16842
46	2	48	2	28.68	4222.38	4222.76	4223.15	176.13	181.30	186.46	0.16842
47	2	48	2	28.47	4245.71	4246.09	4246.48	108.69	113.44	118.21	0.16495
47	7	48	2	28.33	4261.58	4261.96	4262.35	299.26	303.68	308.12	0.16495
47	2	48	2	28.26	4269.20	4269.58	4269.97	26.08	30.50	34.92	0.16495
47	7	49	2	28.12	4285.17	4285.57	4285.96	212.82	217.47	222.15	0.16838
47	2	49	2	28.05	4292.82	4293.21	4293.61	304.27	309.11	313.98	0.16838
47	7	49	2	27.91	4308.89	4309.28	4309.68	121.98	125.68	129.36	0.16838
48	2	49	2	27.64	4340.51	4340.91	4341.30	67.59	71.74	75.89	0.16388
48	7	50	2	27.49	4356.78	4357.19	4357.59	245.95	250.28	254.61	0.16722
48	2	50	2	27.43	4364.58	4364.99	4365.39	328.80	333.05	337.28	0.16722
48	7	50	2	27.28	4380.95	4381.36	4381.76	136.74	140.75	144.74	0.16722
48	2	50	2	27.22	4388.80	4389.20	4389.60	214.96	219.05	223.12	0.16722
48	7	50	2	27.07	4405.28	4405.68	4406.09	29.28	33.63	37.99	0.16722
50	7	70	2	23.20	4880.35	4880.91	4881.47	52.41	58.36	64.27	0.24911
50	2	69	2	23.12	4891.12	4891.68	4892.23	160.54	165.95	171.35	0.24555

50	7	71	2	22.94	4914.02	4914.59	4915.17	30.45	36.25	42.03	0.25267
50	2	71	2	22.86	4925.05	4925.62	4926.20	142.29	148.11	153.91	0.25267
51	2	72	2	20.81	5199.82	5200.40	5200.98	83.84	89.91	95.99	0.24828
51	7	72	2	20.63	5223.35	5223.93	5224.52	322.70	328.36	334.01	0.24828
51	2	73	2	20.55	5234.65	5235.24	5235.83	70.02	75.44	80.84	0.25172
51	7	73	2	20.38	5258.27	5258.86	5259.45	279.18	284.36	289.52	0.25172
54	2	72	2	17.14	5727.77	5728.35	5728.93	218.43	223.84	229.24	0.28800
54	7	72	2	16.98	5751.12	5751.70	5752.28	78.31	83.72	89.12	0.28800
54	2	38	2	16.91	5761.84	5762.15	5762.45	177.76	180.59	183.44	0.15200
54	7	68	2	16.77	5783.34	5783.89	5784.44	18.13	23.28	28.45	0.27200
55	2	64	2	14.93	6070.07	6070.59	6071.10	221.08	225.70	230.33	0.24903
55	7	64	2	14.79	6091.02	6091.54	6092.05	54.60	59.44	64.27	0.24903
55	2	64	2	14.73	6101.07	6101.59	6102.10	148.29	153.13	157.95	0.24903
55	7	65	2	14.60	6122.07	6122.59	6123.12	351.51	356.73	1.97	0.25292
56	7	68	2	12.84	6409.51	6410.05	6410.60	94.99	100.12	105.25	0.25000
56	2	68	2	12.78	6419.98	6420.53	6421.08	193.71	198.85	203.98	0.25000
56	7	68	2	12.64	6442.15	6442.70	6443.25	35.15	39.98	44.80	0.25000
56	2	68	2	12.58	6452.73	6453.28	6453.83	127.49	132.23	136.98	0.25000
57	7	72	2	10.87	6744.36	6744.94	6745.52	355.12	359.82	4.53	0.25000
57	2	72	2	10.81	6755.35	6755.93	6756.51	85.23	90.10	94.98	0.25000
57	7	72	2	10.68	6778.65	6779.23	6779.82	279.21	283.86	288.50	0.25000
57	2	72	2	10.61	6789.69	6790.27	6790.85	6.38	10.89	15.40	0.25000
58	2	74	2	9.04	7070.39	7070.99	7071.59	129.20	133.60	138.03	0.24749
58	7	75	2	8.91	7094.57	7095.17	7095.78	305.09	309.38	313.65	0.25084
58	2	75	2	8.84	7106.23	7106.83	7107.44	28.50	32.95	37.42	0.25084
58	7	75	2	8.71	7130.50	7131.11	7131.71	222.31	227.22	232.11	0.25084
59	7	77	2	7.33	7386.26	7386.88	7387.50	321.25	325.82	330.38	0.24839
59	2	77	2	7.27	7398.12	7398.74	7399.36	47.86	52.36	56.84	0.24839
59	7	78	2	7.13	7423.24	7423.87	7424.50	227.48	232.03	236.61	0.25161
59	2	78	2	7.07	7435.23	7435.86	7436.49	315.85	320.55	325.25	0.25161
60	7	80	2	5.56	7725.33	7725.97	7726.62	313.17	317.71	322.28	0.25000
60	2	80	2	5.49	7737.61	7738.25	7738.90	39.02	43.48	47.92	0.25000

60	7	80	2	5.36	7763.56	7764.21	7764.85	212.63	216.93	221.23	0.25000
60	2	80	2	5.30	7775.91	7776.56	7777.20	296.02	300.41	304.80	0.25000
1	6	1	10	142.26	145.54	145.58	145.62	144.48	143.29	142.10	0.01471
1	6	1	10	142.25	145.70	145.74	145.78	139.72	138.53	137.34	0.01471
1	6	1	10	142.24	145.86	145.90	145.95	134.96	133.78	132.59	0.01471
1	6	1	10	142.23	146.03	146.07	146.11	130.21	129.02	127.83	0.01471
1	3	1	12	141.96	151.24	151.29	151.34	337.38	335.98	334.57	0.01471
1	3	1	12	141.95	151.44	151.49	151.53	331.76	330.35	328.94	0.01471
1	3	1	12	141.94	151.63	151.68	151.73	326.13	324.73	323.32	0.01471
1	3	1	12	141.93	151.82	151.87	151.92	320.51	319.10	317.70	0.01471
1	6	1	12	141.78	154.70	154.75	154.80	237.19	235.79	234.40	0.01471
1	6	1	12	141.77	154.90	154.94	154.99	231.61	230.21	228.82	0.01471
1	6	1	12	141.76	155.09	155.14	155.19	226.03	224.64	223.24	0.01471
1	6	1	12	141.75	155.28	155.33	155.38	220.46	219.06	217.67	0.01471
1	3	1	10	141.47	160.64	160.68	160.72	67.29	66.15	65.00	0.01471
1	3	1	10	141.46	160.80	160.84	160.88	62.71	61.57	60.42	0.01471
1	3	1	10	141.46	160.96	161.00	161.04	58.13	56.99	55.84	0.01471
1	3	1	10	141.45	161.12	161.16	161.20	53.55	52.41	51.27	0.01471
1	3	1	10	141.44	161.28	161.32	161.36	48.98	47.84	46.69	0.01471
1	6	1	10	141.29	164.21	164.25	164.29	326.22	325.08	323.94	0.01471
1	6	1	10	141.28	164.37	164.41	164.45	321.67	320.54	319.40	0.01471
1	6	1	10	141.27	164.53	164.57	164.61	317.13	316.00	314.86	0.01471
1	6	1	10	141.26	164.69	164.73	164.77	312.59	311.46	310.32	0.01471
1	6	1	10	141.26	164.86	164.90	164.94	308.06	306.92	305.79	0.01471
1	3	1	10	140.97	170.38	170.42	170.46	153.75	152.63	151.51	0.01471
1	3	1	10	140.96	170.54	170.58	170.62	149.27	148.16	147.04	0.01471
1	3	1	10	140.95	170.70	170.74	170.78	144.80	143.68	142.57	0.01471
1	3	1	10	140.95	170.86	170.90	170.94	140.33	139.21	138.10	0.01471
1	3	1	10	140.94	171.02	171.06	171.10	135.86	134.75	133.63	0.01471
1	6	1	10	140.78	174.07	174.11	174.15	51.72	50.62	49.51	0.01471
1	6	1	10	140.77	174.23	174.27	174.31	47.29	46.18	45.07	0.01471

1	6	1	10	140.77	174.39	174.44	174.48	42.86	41.75	40.64	0.01471
1	6	1	10	140.76	174.56	174.60	174.64	38.43	37.32	36.21	0.01471
1	6	1	10	140.75	174.72	174.76	174.80	34.00	32.89	31.79	0.01471
1	3	1	10	140.46	180.41	180.45	180.49	238.75	237.66	236.57	0.01471
1	3	1	10	140.45	180.57	180.61	180.65	234.39	233.30	232.21	0.01471
1	3	1	10	140.44	180.73	180.77	180.81	230.03	228.94	227.85	0.01471
1	3	1	10	140.43	180.89	180.93	180.98	225.67	224.58	223.49	0.01471
1	3	1	10	140.43	181.06	181.10	181.14	221.31	220.22	219.13	0.01471
1	6	1	10	140.26	184.22	184.27	184.31	135.98	134.90	133.82	0.01471
1	6	1	10	140.26	184.39	184.43	184.47	131.66	130.58	129.50	0.01471
1	6	1	10	140.25	184.55	184.59	184.63	127.34	126.26	125.18	0.01471
1	6	1	10	140.24	184.71	184.75	184.79	123.01	121.93	120.86	0.01471
1	6	1	10	140.23	184.87	184.91	184.95	118.70	117.62	116.54	0.01471
1	3	1	10	139.94	190.70	190.74	190.78	323.81	322.75	321.69	0.01471
1	3	1	10	139.93	190.86	190.90	190.94	319.56	318.50	317.44	0.01471
1	3	1	10	139.92	191.02	191.06	191.10	315.31	314.25	313.19	0.01471
1	3	1	10	139.91	191.18	191.22	191.26	311.07	310.01	308.95	0.01471
1	3	1	10	139.91	191.35	191.39	191.43	306.82	305.76	304.70	0.01471
1	6	1	10	139.74	194.58	194.62	194.66	222.13	221.07	220.02	0.01471
1	6	1	10	139.73	194.74	194.78	194.82	217.92	216.87	215.82	0.01471
1	6	1	10	139.73	194.90	194.94	194.98	213.72	212.67	211.62	0.01471
1	6	1	10	139.72	195.06	195.10	195.14	209.52	208.47	207.42	0.01471
1	6	1	10	139.71	195.22	195.26	195.30	205.32	204.27	203.22	0.01471
1	3	1	10	139.40	201.35	201.39	201.43	47.26	46.23	45.20	0.01471
1	3	1	10	139.39	201.51	201.55	201.59	43.14	42.11	41.08	0.01471
1	3	1	10	139.39	201.68	201.72	201.76	39.02	37.99	36.96	0.01471
1	3	1	10	139.38	201.84	201.88	201.92	34.91	33.88	32.85	0.01471
1	3	1	10	139.37	202.00	202.04	202.08	30.79	29.76	28.74	0.01471
1	6	1	10	139.20	205.38	205.42	205.46	305.11	304.09	303.07	0.01471
1	6	1	10	139.19	205.54	205.58	205.62	301.04	300.02	299.01	0.01471
1	6	1	10	139.18	205.70	205.74	205.78	296.97	295.96	294.94	0.01471
1	6	1	10	139.18	205.86	205.90	205.94	292.91	291.90	290.88	0.01471

1	6	1	10	139.17	206.02	206.06	206.10	288.85	287.84	286.82	0.01471
1	3	1	10	138.86	212.22	212.26	212.30	134.51	133.52	132.52	0.01471
1	3	1	10	138.85	212.38	212.42	212.46	130.53	129.54	128.55	0.01471
1	3	1	10	138.84	212.54	212.58	212.62	126.56	125.56	124.57	0.01471
1	3	1	10	138.84	212.70	212.74	212.78	122.58	121.59	120.59	0.01471
1	3	1	10	138.83	212.86	212.90	212.94	118.61	117.61	116.62	0.01471
1	3	1	10	138.82	213.02	213.06	213.10	114.64	113.64	112.65	0.01471
2	6	16	2	135.21	287.26	287.39	287.52	275.18	272.65	270.12	0.05316
2	6	16	2	135.19	287.78	287.91	288.04	265.06	262.53	260.00	0.05316
2	6	21	2	134.88	294.21	294.38	294.55	140.81	137.59	134.37	0.06977
2	6	21	2	134.85	294.89	295.06	295.23	127.94	124.73	121.52	0.06977
2	3	19	2	134.27	307.25	307.40	307.56	260.63	257.91	255.18	0.06312
2	3	19	2	134.25	307.86	308.02	308.17	249.74	247.03	244.31	0.06312
2	3	19	2	134.22	308.48	308.63	308.78	238.89	236.19	233.48	0.06312
2	6	20	2	133.90	315.19	315.35	315.51	122.58	119.84	117.10	0.06645
2	6	20	2	133.87	315.83	315.99	316.15	111.63	108.89	106.17	0.06645
2	6	20	2	133.84	316.48	316.64	316.80	100.72	98.00	95.28	0.06645
2	3	18	2	133.35	327.23	327.37	327.52	285.30	283.01	280.72	0.05980
2	3	18	2	133.32	327.81	327.95	328.10	276.15	273.87	271.59	0.05980
2	6	18	2	133.08	332.99	333.14	333.28	196.04	193.83	191.63	0.05980
2	6	18	2	133.05	333.57	333.72	333.86	187.23	185.04	182.84	0.05980
2	3	19	2	132.62	343.07	343.22	343.38	48.00	45.83	43.65	0.06312
2	3	19	2	132.59	343.68	343.84	343.99	39.32	37.15	34.99	0.06312
3	3	23	2	128.20	442.88	443.06	443.25	99.85	98.59	97.34	0.04618
3	3	23	2	128.17	443.62	443.80	443.99	94.84	93.59	92.35	0.04618
3	3	23	2	128.14	444.36	444.54	444.73	89.88	88.65	87.42	0.04618
3	6	23	2	127.80	452.25	452.44	452.62	39.87	38.76	37.64	0.04618
3	6	23	2	127.77	453.00	453.18	453.37	35.43	34.32	33.22	0.04618
3	6	23	2	127.74	453.74	453.92	454.11	31.03	29.94	28.85	0.04618
3	3	21	2	127.23	465.73	465.90	466.07	326.02	325.19	324.35	0.04217
3	3	21	2	127.20	466.41	466.58	466.74	322.69	321.87	321.04	0.04217
3	3	21	2	127.17	467.08	467.25	467.42	319.40	318.58	317.77	0.04217

3	3	21	2	127.14	467.76	467.93	468.10	316.14	315.33	314.53	0.04217
3	6	21	2	126.78	476.43	476.60	476.77	277.47	276.77	276.07	0.04217
3	6	21	2	126.75	477.11	477.28	477.45	274.68	273.99	273.29	0.04217
3	6	21	2	126.72	477.78	477.95	478.12	271.92	271.23	270.55	0.04217
3	6	21	2	126.69	478.46	478.63	478.80	269.19	268.51	267.84	0.04217
3	3	24	2	125.91	497.27	497.47	497.66	206.66	206.14	205.63	0.04819
3	3	24	2	125.88	498.05	498.24	498.44	204.60	204.10	203.59	0.04819
3	3	24	2	125.85	498.82	499.02	499.21	202.59	202.10	201.60	0.04819
3	3	24	2	125.81	499.60	499.79	499.98	200.63	200.14	199.66	0.04819
3	6	24	2	125.39	509.77	509.97	510.16	178.33	177.97	177.62	0.04819
3	6	24	2	125.36	510.55	510.74	510.94	176.91	176.56	176.21	0.04819
3	6	24	2	125.33	511.32	511.52	511.71	175.53	175.19	174.85	0.04819
3	6	24	2	125.30	512.10	512.29	512.48	174.18	173.85	173.52	0.04819
4	3	23	2	124.45	532.97	533.15	533.34	151.27	151.18	151.10	0.04656
4	3	23	2	124.42	533.71	533.90	534.08	150.93	150.85	150.77	0.04656
4	3	23	2	124.39	534.45	534.64	534.82	150.61	150.54	150.47	0.04656
4	3	23	2	124.36	535.19	535.38	535.57	150.33	150.26	150.19	0.04656
4	3	23	2	124.33	535.94	536.12	536.31	150.07	150.01	149.95	0.04656
4	6	23	2	123.88	547.03	547.22	547.40	149.97	150.03	150.09	0.04656
4	6	23	2	123.85	547.77	547.96	548.15	150.22	150.29	150.35	0.04656
4	6	23	2	123.82	548.52	548.70	548.89	150.50	150.57	150.65	0.04656
4	6	23	2	123.79	549.26	549.44	549.63	150.81	150.90	150.98	0.04656
4	6	23	2	123.76	550.00	550.19	550.37	151.16	151.25	151.34	0.04656
4	3	22	2	122.78	574.42	574.59	574.77	180.18	180.52	180.86	0.04453
4	3	22	2	122.76	575.13	575.30	575.48	181.55	181.89	182.24	0.04453
4	3	22	2	122.73	575.84	576.01	576.19	182.95	183.30	183.66	0.04453
4	3	22	2	122.70	576.54	576.72	576.90	184.38	184.74	185.11	0.04453
4	3	22	2	122.67	577.25	577.43	577.61	185.84	186.21	186.59	0.04453
4	3	22	2	122.64	577.96	578.14	578.32	187.34	187.72	188.10	0.04453
4	6	22	2	122.15	590.49	590.66	590.84	218.51	219.01	219.53	0.04453
4	6	22	2	122.12	591.20	591.37	591.55	220.55	221.07	221.59	0.04453
4	6	22	2	122.09	591.91	592.08	592.26	222.64	223.16	223.69	0.04453

4	6	22	2	122.07	592.62	592.79	592.97	224.74	225.27	225.80	0.04453
4	6	22	2	122.04	593.33	593.50	593.68	226.87	227.41	227.95	0.04453
4	6	22	2	122.01	594.04	594.21	594.39	229.03	229.58	230.13	0.04453
8	3	22	2	112.80	844.52	844.70	844.88	99.71	102.50	105.29	0.05914
8	3	22	2	112.77	845.23	845.41	845.59	110.87	113.66	116.46	0.05914
8	3	22	2	112.75	845.94	846.12	846.30	122.05	124.85	127.65	0.05914
8	6	22	2	112.48	853.73	853.91	854.09	246.47	249.33	252.20	0.05914
8	6	22	2	112.46	854.44	854.62	854.80	257.93	260.80	263.68	0.05914
8	6	22	2	112.43	855.15	855.33	855.51	269.42	272.30	275.18	0.05914
8	3	21	2	112.00	868.01	868.18	868.35	121.71	124.55	127.40	0.05645
8	3	21	2	111.97	868.69	868.86	869.03	133.10	135.95	138.80	0.05645
8	3	21	2	111.95	869.37	869.54	869.71	144.51	147.37	150.23	0.05645
8	6	21	2	111.70	876.67	876.83	877.00	268.75	271.66	274.58	0.05645
8	6	21	2	111.68	877.34	877.51	877.68	280.41	283.33	286.25	0.05645
8	6	21	2	111.66	878.02	878.19	878.36	292.09	295.01	297.93	0.05645
8	3	19	2	111.26	890.11	890.26	890.41	143.94	146.67	149.39	0.05108
8	3	19	2	111.24	890.72	890.87	891.03	154.86	157.59	160.32	0.05108
8	3	19	2	111.21	891.33	891.49	891.64	165.79	168.52	171.26	0.05108
8	6	19	2	110.99	898.14	898.29	898.45	288.34	291.12	293.90	0.05108
8	6	19	2	110.97	898.75	898.91	899.06	299.48	302.26	305.05	0.05108
8	6	19	2	110.95	899.37	899.52	899.67	310.63	313.42	316.21	0.05108
9	3	19	2	107.23	965.21	965.37	965.52	272.84	276.74	280.66	0.07336
9	3	19	2	107.19	965.83	965.98	966.13	288.50	292.43	296.37	0.07336
9	6	19	2	106.80	971.29	971.45	971.60	72.05	76.16	80.27	0.07336
9	6	19	2	106.76	971.91	972.06	972.21	88.52	92.64	96.77	0.07336
9	6	15	2	106.22	979.34	979.46	979.58	292.94	296.34	299.75	0.05792
9	6	21	2	105.50	989.17	989.34	989.51	219.71	224.86	230.00	0.08108
9	3	22	2	104.92	997.07	997.24	997.42	105.79	111.45	117.11	0.08494
9	6	21	2	104.58	1001.57	1001.74	1001.91	251.01	256.52	262.04	0.08108
9	3	15	2	104.11	1008.09	1008.21	1008.33	105.65	109.69	113.72	0.05792
9	3	15	2	104.07	1008.57	1008.70	1008.82	121.79	125.83	129.87	0.05792
9	6	15	2	103.75	1012.99	1013.11	1013.23	270.12	274.21	278.31	0.05792

9	6	15	2	103.71	1013.47	1013.59	1013.71	286.51	290.61	294.72	0.05792
9	3	22	2	103.17	1020.75	1020.93	1021.11	175.89	182.03	188.17	0.08494
9	6	22	2	102.84	1025.34	1025.52	1025.69	335.48	341.69	347.90	0.08494
10	3	19	2	100.75	1054.36	1054.51	1054.66	305.97	311.72	317.47	0.08190
10	6	19	2	100.47	1058.30	1058.45	1058.61	94.55	100.36	106.17	0.08190
10	3	18	2	100.02	1064.62	1064.77	1064.91	336.19	341.79	347.39	0.07759
10	6	18	2	99.75	1068.44	1068.58	1068.73	124.06	129.72	135.38	0.07759
10	3	17	2	99.33	1074.55	1074.69	1074.82	4.59	10.04	15.49	0.07328
10	6	17	2	99.07	1078.23	1078.37	1078.51	151.74	157.24	162.76	0.07328
10	3	15	2	98.56	1085.59	1085.71	1085.83	90.76	95.74	100.72	0.06466
10	6	17	2	98.33	1089.02	1089.15	1089.29	232.63	238.34	244.06	0.07328
10	3	16	2	97.93	1094.73	1094.86	1094.99	113.10	118.58	124.05	0.06897
10	6	16	2	97.70	1098.14	1098.27	1098.40	258.76	264.30	269.84	0.06897
10	3	15	2	97.32	1103.72	1103.85	1103.97	140.65	145.94	151.24	0.06466
10	6	15	2	97.10	1107.04	1107.16	1107.28	286.34	291.69	297.04	0.06466
10	3	15	2	96.74	1112.45	1112.57	1112.69	167.46	172.90	178.33	0.06466
10	6	15	2	96.52	1115.71	1115.83	1115.95	314.51	319.99	325.48	0.06466
11	6	14	2	94.89	1140.51	1140.62	1140.73	38.70	44.18	49.66	0.06829
11	3	14	2	94.57	1145.48	1145.59	1145.71	281.74	287.28	292.84	0.06829
11	6	14	2	94.38	1148.44	1148.55	1148.67	67.75	73.34	78.93	0.06829
11	3	13	2	94.07	1153.32	1153.42	1153.53	310.92	316.19	321.45	0.06341
11	6	13	2	93.88	1156.25	1156.35	1156.46	98.31	103.62	108.92	0.06341
11	3	13	2	93.42	1163.56	1163.67	1163.77	111.11	116.50	121.89	0.06341
11	6	13	2	93.24	1166.41	1166.51	1166.62	257.93	263.36	268.79	0.06341
11	3	13	2	92.95	1171.02	1171.13	1171.23	137.87	143.35	148.84	0.06341
11	6	13	2	92.78	1173.79	1173.90	1174.00	283.41	288.93	294.45	0.06341
11	3	12	2	92.49	1178.39	1178.49	1178.58	166.67	171.82	176.97	0.05854
11	6	13	2	92.32	1181.12	1181.22	1181.33	312.21	317.84	323.46	0.06341
11	3	12	2	92.05	1185.57	1185.66	1185.76	192.01	197.26	202.49	0.05854
11	6	12	2	91.88	1188.25	1188.34	1188.44	337.59	342.87	348.14	0.05854
11	3	12	2	91.62	1192.60	1192.70	1192.79	216.40	221.74	227.07	0.05854
11	6	12	2	91.46	1195.21	1195.31	1195.41	0.96	6.33	11.70	0.05854

11	3	12	2	91.20	1199.49	1199.58	1199.68	239.35	244.78	250.20	0.05854
12	6	10	2	89.34	1230.73	1230.81	1230.89	238.58	243.31	248.02	0.03012
12	3	10	2	89.12	1234.48	1234.56	1234.64	98.17	102.90	107.62	0.03012
12	6	10	2	88.99	1236.75	1236.83	1236.91	230.90	235.63	240.35	0.03012
12	3	21	2	88.76	1240.57	1240.74	1240.91	94.67	104.59	114.49	0.06325
12	6	21	2	88.63	1242.81	1242.98	1243.15	225.77	235.68	245.57	0.06325
12	3	10	2	88.41	1246.70	1246.79	1246.87	93.22	97.93	102.63	0.03012
12	6	10	2	88.28	1249.02	1249.10	1249.18	228.09	232.78	237.47	0.03012
12	3	10	2	88.06	1252.81	1252.89	1252.97	88.40	93.08	97.76	0.03012
12	6	10	2	87.93	1255.11	1255.19	1255.27	221.64	226.31	230.98	0.03012
12	3	21	2	87.71	1258.94	1259.11	1259.28	83.13	92.91	102.68	0.06325
12	6	21	2	87.58	1261.19	1261.36	1261.53	212.89	222.65	232.41	0.06325
12	3	21	2	87.36	1264.94	1265.11	1265.28	68.67	78.40	88.13	0.06325
12	6	21	2	87.24	1267.19	1267.36	1267.53	197.84	207.55	217.28	0.06325
12	3	21	2	87.03	1270.87	1271.04	1271.21	49.05	58.75	68.44	0.06325
12	6	21	2	86.91	1273.10	1273.27	1273.44	176.38	186.06	195.75	0.06325
12	3	21	2	86.70	1276.74	1276.91	1277.08	24.62	34.29	43.95	0.06325
12	6	21	2	86.58	1278.94	1279.11	1279.28	150.19	159.86	169.51	0.06325
12	3	21	2	86.38	1282.60	1282.77	1282.94	358.34	7.98	17.62	0.06325
12	6	21	2	86.26	1284.78	1284.95	1285.12	122.67	132.30	141.92	0.06325
12	3	10	2	85.95	1290.53	1290.61	1290.69	89.15	93.73	98.29	0.03012
13	3	20	2	84.38	1319.36	1319.52	1319.68	277.21	286.29	295.38	0.04651
13	6	20	2	84.27	1321.50	1321.66	1321.82	37.57	46.64	55.72	0.04651
13	6	20	2	84.10	1324.68	1324.84	1325.00	216.37	225.44	234.51	0.04651
13	3	22	2	83.87	1329.05	1329.22	1329.40	101.91	111.85	121.81	0.05116
13	6	22	2	83.75	1331.39	1331.57	1331.75	233.46	243.40	253.33	0.05116
13	3	20	2	83.54	1335.36	1335.52	1335.68	95.27	104.27	113.26	0.04651
13	6	20	2	83.43	1337.50	1337.66	1337.82	214.40	223.37	232.34	0.04651
13	3	20	2	83.24	1341.07	1341.23	1341.39	52.83	61.77	70.70	0.04651
13	6	20	2	83.13	1343.22	1343.38	1343.54	171.54	180.45	189.36	0.04651
13	3	20	2	82.95	1346.79	1346.95	1347.11	8.37	17.22	26.07	0.04651
13	6	20	2	82.84	1348.93	1349.09	1349.26	125.95	134.76	143.59	0.04651

13	3	20	2	82.66	1352.50	1352.66	1352.82	320.29	329.05	337.80	0.04651
13	6	20	2	82.55	1354.64	1354.80	1354.96	76.52	85.23	93.94	0.04651
13	3	20	2	82.36	1358.25	1358.42	1358.58	270.97	279.60	288.24	0.04651
13	6	21	2	82.25	1360.42	1360.58	1360.75	26.44	35.47	44.49	0.04884
13	3	21	2	82.07	1364.02	1364.19	1364.36	217.54	226.47	235.40	0.04884
13	6	20	2	81.96	1366.19	1366.35	1366.51	331.59	340.04	348.49	0.04651
13	3	21	2	81.78	1369.81	1369.98	1370.15	160.44	169.22	178.00	0.04884
13	6	21	2	81.67	1372.00	1372.17	1372.33	273.38	282.10	290.82	0.04884
13	3	21	2	81.49	1375.63	1375.80	1375.97	99.84	108.48	117.11	0.04884
13	6	21	2	81.38	1377.82	1377.99	1378.16	210.91	219.49	228.07	0.04884
14	3	12	2	79.70	1412.14	1412.24	1412.33	88.85	93.47	98.10	0.02878
14	6	12	2	79.57	1414.89	1414.99	1415.08	220.19	224.80	229.42	0.02878
14	3	11	2	79.39	1418.57	1418.65	1418.74	35.56	39.79	44.02	0.02638
14	6	22	2	79.29	1420.61	1420.78	1420.96	132.75	141.19	149.64	0.05276
14	3	22	2	79.11	1424.43	1424.61	1424.78	314.62	323.06	331.49	0.05276
14	6	22	2	79.00	1426.73	1426.90	1427.08	63.86	72.28	80.71	0.05276
14	3	22	2	78.81	1430.62	1430.80	1430.98	248.75	257.16	265.57	0.05276
14	6	22	2	78.71	1432.94	1433.12	1433.30	358.82	7.22	15.62	0.05276
14	3	22	2	78.52	1436.85	1437.03	1437.21	183.77	192.15	200.53	0.05276
14	6	22	2	78.41	1439.20	1439.38	1439.56	294.51	302.87	311.23	0.05276
14	3	22	2	78.23	1443.12	1443.30	1443.48	118.83	127.15	135.48	0.05276
14	6	23	2	78.12	1445.48	1445.67	1445.85	229.56	238.24	246.91	0.05516
14	3	23	2	77.94	1449.43	1449.62	1449.81	54.00	62.63	71.27	0.05516
14	6	22	2	77.83	1451.81	1451.98	1452.16	164.15	172.37	180.59	0.05276
14	3	23	2	77.64	1455.81	1455.99	1456.18	349.00	357.55	6.09	0.05516
14	6	23	2	77.53	1458.20	1458.39	1458.57	99.10	107.61	116.11	0.05516
14	3	23	2	77.35	1462.26	1462.45	1462.64	284.74	293.17	301.61	0.05516
14	6	23	2	77.24	1464.68	1464.87	1465.05	34.58	42.99	51.38	0.05516
14	3	23	2	77.06	1468.76	1468.95	1469.14	218.58	226.90	235.23	0.05516
14	6	23	2	76.94	1471.21	1471.39	1471.58	328.00	336.29	344.57	0.05516
15	3	16	2	74.22	1534.04	1534.17	1534.30	103.17	108.39	113.62	0.07583
15	6	16	2	74.08	1537.39	1537.52	1537.65	238.89	244.11	249.32	0.07583

15	3	10	2	73.89	1541.85	1541.93	1542.01	59.32	62.59	65.85	0.04739
15	6	13	2	73.80	1544.08	1544.18	1544.29	149.15	153.38	157.61	0.06161
15	3	13	2	73.61	1548.71	1548.81	1548.92	334.75	338.92	343.09	0.06161
15	6	13	2	73.49	1551.49	1551.59	1551.70	84.90	89.03	93.16	0.06161
15	3	13	2	73.30	1556.12	1556.22	1556.33	266.17	270.24	274.31	0.06161
15	6	13	2	73.19	1558.90	1559.01	1559.11	13.38	17.39	21.40	0.06161
15	3	13	2	73.00	1563.60	1563.71	1563.81	191.33	195.25	199.17	0.06161
15	6	13	2	72.88	1566.42	1566.52	1566.63	295.94	299.82	303.70	0.06161
15	3	13	2	72.69	1571.17	1571.28	1571.38	110.49	114.32	118.16	0.06161
15	6	13	2	72.58	1574.02	1574.13	1574.23	214.62	218.44	222.26	0.06161
15	3	13	2	72.38	1578.85	1578.96	1579.06	28.75	32.48	36.22	0.06161
15	6	13	2	72.27	1581.74	1581.84	1581.95	131.21	134.93	138.64	0.06161
15	3	13	2	72.07	1586.63	1586.74	1586.84	304.29	307.98	311.66	0.06161
15	6	13	2	71.96	1589.56	1589.66	1589.77	46.64	50.29	53.94	0.06161
16	6	15	2	70.61	1624.35	1624.47	1624.59	190.52	194.78	199.03	0.07109
16	3	15	2	70.41	1629.61	1629.73	1629.85	15.12	19.35	23.59	0.07109
16	6	15	2	70.29	1632.78	1632.90	1633.02	126.04	130.28	134.52	0.07109
16	3	15	2	70.10	1638.10	1638.22	1638.34	311.86	316.03	320.21	0.07109
16	6	15	2	69.98	1641.31	1641.43	1641.55	62.12	66.27	70.41	0.07109
16	3	15	2	69.78	1646.66	1646.78	1646.91	246.52	250.71	254.89	0.07109
16	6	15	2	69.66	1649.88	1650.00	1650.12	358.16	2.38	6.60	0.07109
16	3	15	2	69.47	1655.35	1655.47	1655.59	188.11	192.30	196.49	0.07109
16	6	15	2	69.35	1658.61	1658.73	1658.85	299.15	303.17	307.19	0.07109
16	3	15	2	69.15	1664.04	1664.16	1664.28	115.28	119.19	123.10	0.07109
16	6	15	2	69.04	1667.31	1667.43	1667.55	221.10	225.02	228.94	0.07109
16	3	15	2	68.84	1672.85	1672.97	1673.09	40.61	44.53	48.45	0.07109
16	6	15	2	68.72	1676.15	1676.27	1676.40	147.95	151.88	155.82	0.07109
16	3	16	2	68.52	1681.83	1681.96	1682.09	332.88	337.09	341.30	0.07583
17	6	17	2	67.44	1713.08	1713.22	1713.35	275.93	280.37	284.82	0.07173
17	3	16	2	67.25	1718.96	1719.09	1719.22	105.49	109.61	113.72	0.06751
17	6	16	2	67.13	1722.48	1722.60	1722.73	217.07	221.13	225.18	0.06751
17	3	17	2	66.93	1728.31	1728.45	1728.59	36.30	40.44	44.57	0.07173

17	6	17	2	66.82	1731.83	1731.97	1732.10	142.12	146.26	150.39	0.07173
17	3	17	2	66.62	1737.81	1737.95	1738.09	323.45	327.67	331.91	0.07173
17	6	17	2	66.51	1741.39	1741.52	1741.66	74.31	78.57	82.84	0.07173
17	3	17	2	66.31	1747.34	1747.48	1747.62	258.60	262.79	266.98	0.07173
17	6	17	2	66.20	1750.91	1751.05	1751.18	5.56	9.62	13.67	0.07173
17	3	17	2	66.01	1757.05	1757.18	1757.32	185.68	189.68	193.68	0.07173
17	6	17	2	65.89	1760.67	1760.81	1760.95	291.28	295.25	299.23	0.07173
17	3	17	2	65.70	1766.88	1767.01	1767.15	110.34	114.26	118.19	0.07173
17	6	17	2	65.58	1770.56	1770.70	1770.83	215.03	218.91	222.79	0.07173
17	3	18	2	65.39	1776.80	1776.95	1777.09	32.02	36.15	40.28	0.07595
18	6	18	2	64.61	1802.68	1802.83	1802.97	61.22	65.32	69.44	0.08036
18	3	18	2	64.41	1809.15	1809.29	1809.44	245.83	249.97	254.11	0.08036
18	6	18	2	64.30	1813.03	1813.17	1813.32	355.40	359.47	3.53	0.08036
18	3	18	2	64.11	1819.50	1819.64	1819.79	176.76	180.85	184.94	0.08036
18	6	18	2	64.00	1823.37	1823.52	1823.66	286.41	290.53	294.65	0.08036
18	3	19	2	63.81	1830.03	1830.18	1830.33	116.27	120.63	124.98	0.08482
18	6	19	2	63.70	1833.97	1834.12	1834.28	227.99	232.32	236.65	0.08482
18	3	19	2	63.50	1840.72	1840.87	1841.03	58.39	62.69	66.99	0.08482
18	6	19	2	63.39	1844.74	1844.89	1845.04	170.47	174.72	178.97	0.08482
18	3	19	2	63.20	1851.61	1851.77	1851.92	358.94	3.07	7.19	0.08482
18	6	19	2	63.09	1855.70	1855.85	1856.01	109.59	113.78	117.96	0.08482
18	3	20	2	62.89	1862.74	1862.90	1863.06	303.74	308.21	312.68	0.08929
22	6	26	2	59.21	2008.39	2008.60	2008.80	239.13	244.59	250.04	0.11207
22	3	22	2	59.01	2016.97	2017.15	2017.33	95.08	99.48	103.89	0.09483
22	6	23	2	58.90	2021.64	2021.83	2022.01	210.60	215.18	219.75	0.09914
22	3	23	2	58.71	2029.46	2029.64	2029.83	44.90	49.54	54.19	0.09914
22	6	23	2	58.61	2034.14	2034.33	2034.51	162.71	167.40	172.08	0.09914
22	3	23	2	58.43	2041.96	2042.14	2042.33	2.10	6.89	11.67	0.09914
22	6	23	2	58.32	2046.64	2046.83	2047.01	121.67	126.30	130.93	0.09914
22	3	23	2	58.14	2054.46	2054.64	2054.83	316.35	321.08	325.81	0.09914
22	6	23	2	58.03	2059.14	2059.33	2059.51	76.42	81.17	85.91	0.09914
22	3	23	2	57.86	2066.99	2067.18	2067.37	276.00	280.67	285.34	0.09914

23	6	23	2	57.18	2097.31	2097.49	2097.68	293.80	298.27	302.72	0.09871
23	3	23	2	57.01	2105.28	2105.47	2105.65	122.62	126.96	131.29	0.09871
23	6	23	2	56.90	2110.07	2110.26	2110.44	233.82	238.13	242.43	0.09871
23	3	23	2	56.72	2118.73	2118.92	2119.10	74.78	79.11	83.45	0.09871
23	6	23	2	56.61	2123.52	2123.71	2123.89	187.58	191.97	196.37	0.09871
23	3	23	2	56.44	2131.51	2131.69	2131.88	14.80	19.11	23.42	0.09871
23	6	23	2	56.34	2136.30	2136.48	2136.67	126.23	130.56	134.88	0.09871
23	3	24	2	56.10	2147.45	2147.64	2147.84	24.89	29.33	33.77	0.10300
23	6	24	2	56.00	2152.33	2152.53	2152.72	134.67	138.93	143.17	0.10300
23	3	24	2	55.83	2160.49	2160.68	2160.87	311.22	315.38	319.55	0.10300
24	6	25	2	54.35	2232.76	2232.97	2233.17	354.73	358.55	2.37	0.08532
24	3	26	2	54.18	2241.60	2241.81	2242.02	162.48	166.46	170.45	0.08874
24	6	26	2	54.07	2246.96	2247.17	2247.38	263.81	267.75	271.68	0.08874
24	3	26	2	53.90	2255.88	2256.09	2256.30	69.21	73.11	77.00	0.08874
24	6	26	2	53.79	2261.25	2261.46	2261.66	169.51	173.45	177.40	0.08874
24	3	27	2	53.61	2270.51	2270.73	2270.95	343.19	347.24	351.31	0.09215
24	6	27	2	53.50	2275.99	2276.21	2276.43	85.94	90.05	94.19	0.09215
24	3	27	2	53.32	2285.49	2285.70	2285.92	267.51	271.59	275.67	0.09215
24	6	27	2	53.21	2291.11	2291.33	2291.55	11.70	15.69	19.67	0.09215
24	6	28	2	53.04	2300.45	2300.68	2300.90	181.66	185.73	189.81	0.09556
24	3	28	2	52.85	2310.07	2310.30	2310.52	350.92	354.79	358.64	0.09556
25	6	29	2	52.65	2320.91	2321.14	2321.37	175.07	179.01	182.96	0.12033
25	3	29	2	52.46	2330.77	2331.00	2331.24	345.61	349.76	353.92	0.12033
25	6	29	2	52.35	2336.70	2336.93	2337.16	90.75	94.83	98.91	0.12033
25	3	30	2	52.16	2346.90	2347.14	2347.38	266.61	270.71	274.81	0.12448
25	6	30	2	52.05	2352.98	2353.22	2353.46	8.79	12.82	16.84	0.12448
25	3	31	2	51.86	2363.36	2363.61	2363.86	179.00	183.04	187.08	0.12863
25	6	31	2	51.74	2369.61	2369.86	2370.11	279.01	282.97	286.94	0.12863
25	3	32	2	51.55	2380.26	2380.51	2380.77	85.47	89.45	93.44	0.13278
26	3	31	2	50.93	2414.56	2414.81	2415.06	263.08	267.07	271.07	0.11969
26	6	32	2	50.82	2420.97	2421.23	2421.49	5.52	9.65	13.77	0.12355
26	3	32	2	50.62	2432.17	2432.42	2432.68	185.06	189.21	193.35	0.12355

26	6	33	2	50.51	2438.76	2439.03	2439.30	290.82	295.09	299.34	0.12741
26	3	33	2	50.31	2449.79	2450.06	2450.33	105.93	110.06	114.20	0.12741
26	6	32	2	50.20	2456.43	2456.69	2456.95	208.17	212.10	216.02	0.12355
26	3	33	2	50.01	2467.44	2467.71	2467.97	11.47	15.34	19.20	0.12741
26	6	33	2	49.89	2474.06	2474.33	2474.59	108.74	112.71	116.67	0.12741
30	6	64	2	47.54	2615.97	2616.49	2617.01	180.96	188.92	196.88	0.15202
30	3	65	2	47.37	2626.68	2627.21	2627.73	348.93	357.30	5.68	0.15439
30	6	65	2	47.26	2633.11	2633.63	2634.16	91.22	99.47	107.71	0.15439
30	3	65	2	47.10	2643.83	2644.35	2644.88	258.83	266.92	275.02	0.15439
30	6	65	2	47.00	2650.25	2650.78	2651.30	357.57	5.58	13.57	0.15439
30	3	32	2	46.83	2661.03	2661.29	2661.55	161.00	164.89	168.78	0.07601
30	6	33	2	46.73	2667.63	2667.90	2668.16	259.74	263.69	267.64	0.07838
30	3	32	2	46.56	2678.57	2678.82	2679.08	59.99	63.75	67.51	0.07601
31	6	69	2	46.06	2710.83	2711.38	2711.94	197.91	207.39	216.87	0.18449
31	3	67	2	45.89	2722.00	2722.54	2723.08	23.02	31.79	40.54	0.17914
31	6	67	2	45.79	2728.62	2729.16	2729.70	129.53	138.12	146.69	0.17914
31	3	81	2	45.50	2747.99	2748.65	2749.30	74.12	84.46	94.82	0.21658
31	6	81	2	45.38	2755.98	2756.63	2757.28	201.44	211.95	222.48	0.21658
31	3	9	2	45.24	2766.07	2766.15	2766.22	6.29	7.48	8.69	0.02406
32	3	63	2	44.74	2799.09	2799.60	2800.11	207.17	216.02	224.86	0.12600
32	6	63	2	44.65	2805.33	2805.84	2806.35	315.31	324.10	332.87	0.12600
32	3	63	2	44.50	2815.75	2816.26	2816.77	131.87	140.21	148.55	0.12600
32	6	63	2	44.41	2822.00	2822.51	2823.02	234.03	242.37	250.73	0.12600
32	3	61	2	44.27	2832.03	2832.52	2833.01	40.80	48.99	57.19	0.12200
32	6	61	2	44.18	2838.11	2838.60	2839.10	141.89	150.07	158.24	0.12200
32	3	63	2	44.03	2848.76	2849.26	2849.77	315.99	324.11	332.22	0.12600
32	6	63	2	43.94	2855.01	2855.51	2856.02	55.01	62.99	70.97	0.12600
33	6	84	2	43.46	2888.88	2889.56	2890.23	222.26	232.78	243.32	0.19400
33	3	94	2	43.23	2904.77	2905.53	2906.29	110.45	122.51	134.60	0.21709
33	6	97	2	43.10	2914.18	2914.96	2915.74	262.22	275.11	288.07	0.22402
33	3	26	2	42.94	2926.51	2926.72	2926.93	109.14	112.68	116.22	0.06005
33	6	67	2	42.86	2932.14	2932.68	2933.22	203.93	212.90	221.84	0.15473

33	3	65	2	42.71	2943.08	2943.61	2944.13	17.96	26.00	34.04	0.15012
34	3	66	2	42.23	2978.29	2978.83	2979.36	180.71	188.56	196.41	0.12865
34	6	66	2	42.14	2984.91	2985.45	2985.98	280.47	288.78	297.11	0.12865
34	3	66	2	41.99	2996.24	2996.77	2997.30	102.77	111.52	120.32	0.12865
34	6	67	2	41.90	3002.85	3003.39	3003.93	212.74	221.73	230.71	0.13060
34	3	65	2	41.75	3013.71	3014.23	3014.76	31.61	40.17	48.74	0.12671
34	6	64	2	41.67	3020.15	3020.66	3021.18	136.15	144.49	152.83	0.12476
34	3	59	2	41.50	3033.00	3033.47	3033.95	341.81	349.33	356.84	0.11501
34	6	60	2	41.42	3038.93	3039.42	3039.90	75.62	83.27	90.93	0.11696
35	3	62	2	40.37	3120.06	3120.56	3121.06	239.02	246.32	253.64	0.12450
35	6	62	2	40.29	3126.19	3126.69	3127.19	328.99	336.32	343.66	0.12450
35	3	62	2	40.16	3136.52	3137.02	3137.52	120.70	128.12	135.57	0.12450
35	6	62	2	40.08	3142.70	3143.20	3143.70	211.81	218.99	226.12	0.12450
35	3	62	2	39.95	3153.09	3153.59	3154.09	349.91	356.18	2.44	0.12450
35	6	62	2	39.88	3159.30	3159.80	3160.30	68.85	75.44	82.08	0.12450
35	3	63	2	39.74	3169.75	3170.25	3170.76	213.74	220.90	228.03	0.12651
35	6	63	2	39.67	3176.00	3176.50	3177.01	300.29	307.22	314.15	0.12651
36	6	64	2	39.25	3209.73	3210.24	3210.76	42.86	50.09	57.33	0.12427
36	3	64	2	39.12	3220.36	3220.88	3221.40	191.17	198.35	205.53	0.12427
36	6	64	2	39.04	3226.73	3227.24	3227.76	279.87	287.08	294.32	0.12427
36	3	64	2	38.91	3237.45	3237.97	3238.48	69.81	76.94	84.07	0.12427
36	6	64	2	38.83	3243.86	3244.38	3244.89	158.40	165.49	172.57	0.12427
36	3	65	2	38.70	3254.63	3255.16	3255.68	300.78	307.31	313.80	0.12621
36	6	65	2	38.62	3261.08	3261.60	3262.13	19.95	26.35	32.76	0.12621
36	3	65	2	38.49	3271.93	3272.46	3272.98	155.31	161.93	168.56	0.12621
37	6	65	2	38.21	3295.89	3296.42	3296.94	137.09	145.10	153.11	0.12241
37	3	66	2	38.08	3306.83	3307.37	3307.90	298.25	305.60	312.90	0.12429
37	6	66	2	38.00	3313.41	3313.94	3314.47	27.30	34.40	41.51	0.12429
37	3	67	2	37.87	3324.45	3324.99	3325.53	173.99	181.10	188.21	0.12618
37	6	66	2	37.79	3331.06	3331.59	3332.12	261.52	268.64	275.75	0.12429
37	3	67	2	37.66	3342.17	3342.71	3343.25	51.38	58.79	66.21	0.12618
37	6	67	2	37.58	3348.82	3349.36	3349.90	143.35	150.90	158.46	0.12618

37	3	67	2	37.45	3360.00	3360.54	3361.08	304.93	313.13	321.35	0.12618
38	3	68	2	37.14	3386.65	3387.19	3387.74	356.52	5.04	13.57	0.12409
38	6	68	2	37.07	3393.40	3393.94	3394.49	101.15	109.66	118.16	0.12409
38	3	68	2	36.94	3404.76	3405.31	3405.85	274.42	282.44	290.43	0.12409
38	6	68	2	36.86	3411.56	3412.10	3412.65	12.07	19.79	27.48	0.12409
38	3	69	2	36.73	3422.99	3423.55	3424.10	167.87	175.22	182.55	0.12591
38	6	69	2	36.65	3429.82	3430.38	3430.93	257.94	265.32	272.71	0.12591
38	3	69	2	36.52	3441.33	3441.88	3442.44	50.58	57.92	65.24	0.12591
38	6	69	2	36.44	3448.21	3448.76	3449.32	140.53	147.73	154.93	0.12591
39	3	70	2	36.10	3478.34	3478.90	3479.47	190.54	198.72	206.92	0.12367
39	6	70	2	36.03	3485.29	3485.85	3486.42	292.21	300.60	308.98	0.12367
39	3	70	2	35.91	3495.35	3495.92	3496.48	83.10	91.60	100.15	0.12367
39	6	71	2	35.84	3502.34	3502.91	3503.49	189.68	198.38	207.08	0.12544
39	3	71	2	35.71	3514.13	3514.70	3515.28	4.20	12.41	20.60	0.12544
39	6	71	2	35.63	3521.17	3521.74	3522.32	102.43	110.12	117.78	0.12544
39	3	71	2	35.45	3537.15	3537.73	3538.30	307.88	314.87	321.86	0.12544
39	6	72	2	35.38	3544.25	3544.83	3545.41	34.52	41.73	48.96	0.12721
40	3	72	2	35.04	3575.37	3575.95	3576.53	81.19	88.71	96.20	0.12329
40	6	72	2	34.96	3582.57	3583.15	3583.73	173.73	181.24	188.77	0.12329
40	3	73	2	34.83	3594.66	3595.25	3595.84	338.95	347.49	356.07	0.12500
40	6	73	2	34.75	3601.89	3602.48	3603.06	85.12	93.91	102.73	0.12500
40	3	73	2	34.62	3614.07	3614.66	3615.25	268.91	277.44	285.92	0.12500
40	6	73	2	34.55	3621.35	3621.94	3622.53	12.29	20.60	28.95	0.12500
40	3	74	2	34.41	3633.61	3634.21	3634.80	192.41	201.40	210.36	0.12671
40	6	74	2	34.34	3640.93	3641.53	3642.13	301.40	310.22	319.03	0.12671
41	6	74	2	34.17	3656.60	3657.20	3657.79	165.90	174.13	182.37	0.12292
41	3	75	2	34.04	3668.95	3669.56	3670.16	341.17	350.02	358.86	0.12458
41	6	75	2	33.96	3676.35	3676.95	3677.56	87.40	95.77	104.08	0.12458
41	3	75	2	33.83	3688.83	3689.44	3690.04	256.86	265.26	273.71	0.12458
41	6	75	2	33.76	3696.28	3696.89	3697.49	1.89	10.50	19.11	0.12458
41	3	76	2	33.63	3708.82	3709.44	3710.05	179.81	188.49	197.17	0.12625
41	6	76	2	33.55	3716.31	3716.93	3717.54	285.14	293.65	302.15	0.12625

41	3	76	2	33.43	3728.14	3728.76	3729.37	89.44	98.11	106.80	0.12625
42	6	77	2	32.72	3796.99	3797.61	3798.24	319.41	327.28	335.14	0.16383
42	3	78	2	32.59	3809.89	3810.52	3811.15	115.07	122.05	128.98	0.16596
42	6	78	2	32.52	3817.62	3818.25	3818.88	199.61	206.58	213.62	0.16596
42	3	79	2	32.39	3830.65	3831.29	3831.93	1.21	9.78	18.37	0.16809
42	6	79	2	32.31	3838.43	3839.07	3839.71	103.75	111.93	120.09	0.16809
42	3	79	2	32.18	3851.55	3852.18	3852.82	270.80	278.93	287.05	0.16809
43	3	80	2	31.76	3893.71	3894.35	3895.00	19.42	25.35	31.32	0.16563
43	6	80	2	31.68	3901.63	3902.28	3902.92	98.15	105.17	112.26	0.16563
43	3	81	2	31.55	3914.98	3915.63	3916.29	259.56	268.57	277.80	0.16770
43	6	80	2	31.48	3922.95	3923.60	3924.24	22.94	33.39	43.71	0.16563
43	3	81	2	31.35	3936.39	3937.05	3937.70	222.31	231.51	240.69	0.16770
43	6	81	2	31.27	3944.42	3945.07	3945.73	331.30	339.91	348.48	0.16770
44	3	82	2	30.93	3979.62	3980.28	3980.94	133.90	143.75	153.59	0.16566
44	6	82	2	30.85	3987.74	3988.40	3989.06	257.86	268.58	279.42	0.16566
44	3	83	2	30.73	3999.91	4000.58	4001.25	106.44	118.22	130.06	0.16768
44	6	82	2	30.66	4008.09	4008.75	4009.41	251.02	262.55	274.05	0.16566
44	3	83	2	30.53	4021.86	4022.52	4023.19	125.01	135.90	146.78	0.16768
44	6	83	2	30.45	4030.08	4030.75	4031.42	256.50	266.99	277.44	0.16768
45	3	84	2	30.11	4066.15	4066.83	4067.51	56.69	65.92	75.17	0.16535
45	6	84	2	30.03	4074.48	4075.16	4075.84	170.33	179.59	188.87	0.16535
45	3	85	2	29.90	4088.49	4089.17	4089.86	4.56	14.14	23.70	0.16732
45	6	85	2	29.82	4096.87	4097.55	4098.24	119.89	129.17	138.42	0.16732
45	3	85	2	29.69	4110.99	4111.67	4112.36	308.65	317.74	326.82	0.16732
45	6	85	2	29.62	4119.41	4120.10	4120.78	58.95	67.73	76.49	0.16732
46	3	86	2	29.28	4156.41	4157.11	4157.80	124.00	130.51	136.96	0.16507
46	6	86	2	29.20	4164.94	4165.64	4166.33	203.38	209.97	216.61	0.16507
46	3	87	2	29.07	4179.31	4180.02	4180.72	356.50	4.69	12.89	0.16699
46	6	87	2	28.99	4187.90	4188.60	4189.31	98.26	106.79	115.36	0.16699
46	3	88	2	28.86	4202.38	4203.09	4203.80	278.93	287.79	296.65	0.16891
46	6	87	2	28.78	4211.02	4211.72	4212.43	27.33	36.24	45.16	0.16699
47	3	89	2	28.44	4248.94	4249.66	4250.38	148.43	157.24	166.02	0.16604

47	6	89	2	28.36	4257.69	4258.41	4259.13	254.08	262.51	270.90	0.16604
47	3	89	2	28.23	4272.46	4273.17	4273.89	63.47	71.80	80.16	0.16604
47	6	89	2	28.15	4281.26	4281.98	4282.70	166.64	175.11	183.57	0.16604
47	3	90	2	28.02	4296.09	4296.82	4297.54	344.39	353.14	1.83	0.16791
47	6	90	2	27.94	4304.95	4305.68	4306.40	83.86	91.09	98.23	0.16791
48	3	91	2	27.60	4343.83	4344.56	4345.29	102.87	110.85	118.87	0.16606
48	6	91	2	27.53	4352.79	4353.53	4354.26	202.23	210.34	218.44	0.16606
48	3	91	2	27.39	4367.92	4368.65	4369.39	3.78	11.43	19.05	0.16606
48	6	91	2	27.32	4376.94	4377.68	4378.41	96.67	104.06	111.42	0.16606
48	3	92	2	27.18	4392.16	4392.90	4393.65	249.31	257.00	264.74	0.16788
48	6	92	2	27.11	4401.24	4401.98	4402.73	345.65	353.66	1.66	0.16788
50	3	128	2	23.34	4862.15	4863.18	4864.21	212.80	223.86	234.95	0.24903
50	6	128	2	23.24	4874.74	4875.77	4876.81	351.40	2.85	14.21	0.24903
50	3	129	2	23.08	4895.76	4896.80	4897.84	205.74	215.94	226.20	0.25097
50	6	129	2	22.98	4908.40	4909.44	4910.48	333.07	343.72	354.38	0.25097
51	3	132	2	20.77	5204.62	5205.69	5206.75	133.95	145.02	156.06	0.24906
51	6	132	2	20.67	5217.59	5218.65	5219.72	265.96	276.50	287.01	0.24906
51	3	133	2	20.52	5239.47	5240.54	5241.61	113.63	123.20	132.69	0.25094
51	6	133	2	20.42	5252.49	5253.56	5254.63	228.20	237.66	247.14	0.25094
54	3	131	2	17.10	5732.54	5733.59	5734.65	263.02	272.99	282.96	0.25586
54	6	131	2	17.02	5745.41	5746.46	5747.52	24.63	34.60	44.54	0.25586
54	3	125	2	16.88	5765.64	5766.65	5767.65	213.00	222.36	231.72	0.24414
54	6	125	2	16.80	5777.89	5778.90	5779.90	327.06	336.47	345.88	0.24414
55	3	117	2	14.90	6074.35	6075.29	6076.23	259.62	268.24	276.89	0.24894
55	6	117	2	14.82	6085.89	6086.84	6087.78	6.60	15.44	24.29	0.24894
55	3	118	2	14.70	6105.34	6106.30	6107.25	188.44	197.40	206.44	0.25106
55	6	118	2	14.63	6116.92	6117.88	6118.83	300.30	309.73	319.17	0.25106
56	3	124	2	12.75	6424.50	6425.50	6426.50	235.72	244.92	254.06	0.24900
56	6	124	2	12.67	6436.71	6437.71	6438.71	346.77	355.74	4.67	0.24900
56	3	125	2	12.55	6457.27	6458.28	6459.28	166.42	174.95	183.42	0.25100
56	6	125	2	12.48	6469.56	6470.57	6471.57	266.25	273.97	281.62	0.25100
57	6	130	2	10.90	6738.68	6739.73	6740.78	309.27	317.71	326.18	0.24857

57	3	131	2	10.78	6760.10	6761.16	6762.21	125.26	134.23	143.20	0.25048
57	6	131	2	10.71	6772.95	6774.00	6775.06	233.10	241.68	250.26	0.25048
57	3	131	2	10.59	6794.45	6795.51	6796.56	43.18	51.25	59.30	0.25048
58	3	136	2	9.01	7075.32	7076.42	7077.51	165.63	173.70	181.78	0.25000
58	6	136	2	8.94	7088.64	7089.74	7090.83	262.99	270.83	278.65	0.25000
58	3	136	2	8.81	7111.18	7112.28	7113.37	65.64	74.10	82.66	0.25000
58	6	136	2	8.74	7124.56	7125.65	7126.75	173.53	182.56	191.60	0.25000
59	3	141	2	7.24	7403.24	7404.38	7405.52	84.79	92.93	101.05	0.24912
59	6	141	2	7.16	7417.09	7418.23	7419.36	183.33	191.45	199.58	0.24912
59	3	142	2	7.04	7440.38	7441.52	7442.67	354.32	2.88	11.43	0.25088
59	6	142	2	6.97	7454.28	7455.42	7456.57	97.99	106.59	115.19	0.25088
60	3	146	2	5.46	7742.90	7744.08	7745.25	75.22	83.19	91.10	0.25000
60	6	146	2	5.39	7757.20	7758.37	7759.55	170.42	178.23	186.02	0.25000
60	3	146	2	5.27	7781.21	7782.39	7783.57	332.15	340.18	348.21	0.25000
60	6	146	2	5.19	7795.54	7796.72	7797.90	69.03	76.84	84.61	0.25000
1	4	1	10	142.37	143.32	143.36	143.40	210.36	209.16	207.97	0.01515
1	4	1	10	142.36	143.48	143.52	143.56	205.57	204.38	203.18	0.01515
1	4	1	10	142.35	143.64	143.68	143.72	200.79	199.59	198.40	0.01515
1	4	1	10	142.35	143.80	143.84	143.88	196.01	194.81	193.61	0.01515
1	5	1	10	142.31	144.42	144.46	144.50	177.61	176.42	175.22	0.01515
1	5	1	10	142.31	144.58	144.62	144.66	172.84	171.64	170.45	0.01515
1	5	1	10	142.30	144.74	144.78	144.82	168.07	166.87	165.68	0.01515
1	5	1	10	142.29	144.90	144.95	144.99	163.30	162.10	160.91	0.01515
1	4	1	12	141.90	152.40	152.44	152.49	303.89	302.49	301.08	0.01515
1	4	1	12	141.89	152.59	152.64	152.69	298.28	296.88	295.47	0.01515
1	4	1	12	141.88	152.78	152.83	152.88	292.67	291.27	289.87	0.01515
1	4	1	12	141.87	152.98	153.03	153.07	287.06	285.66	284.26	0.01515
1	5	1	12	141.84	153.55	153.60	153.65	270.49	269.09	267.69	0.01515
1	5	1	12	141.83	153.74	153.79	153.84	264.90	263.50	262.10	0.01515
1	5	1	12	141.82	153.94	153.99	154.03	259.30	257.91	256.51	0.01515
1	5	1	12	141.81	154.13	154.18	154.23	253.71	252.32	250.92	0.01515

1	4	1	10	141.41	161.83	161.87	161.91	33.44	32.29	31.15	0.01515
1	4	1	10	141.40	161.99	162.03	162.07	28.87	27.73	26.59	0.01515
1	4	1	10	141.39	162.15	162.19	162.23	24.30	23.16	22.02	0.01515
1	4	1	10	141.39	162.32	162.36	162.40	19.74	18.60	17.45	0.01515
1	4	1	10	141.38	162.48	162.52	162.56	15.17	14.03	12.89	0.01515
1	5	1	10	141.35	163.02	163.06	163.10	359.90	358.76	357.62	0.01515
1	5	1	10	141.34	163.18	163.22	163.26	355.34	354.20	353.06	0.01515
1	5	1	10	141.33	163.34	163.38	163.42	350.78	349.65	348.51	0.01515
1	5	1	10	141.32	163.50	163.54	163.58	346.23	345.09	343.96	0.01515
1	5	1	10	141.32	163.66	163.70	163.74	341.68	340.54	339.40	0.01515
1	4	1	10	140.91	171.61	171.65	171.69	119.57	118.45	117.34	0.01515
1	4	1	10	140.90	171.77	171.81	171.85	115.11	113.99	112.88	0.01515
1	4	1	10	140.89	171.94	171.98	172.02	110.65	109.54	108.42	0.01515
1	4	1	10	140.88	172.10	172.14	172.18	106.19	105.08	103.97	0.01515
1	4	1	10	140.88	172.26	172.30	172.34	101.74	100.62	99.51	0.01515
1	5	1	10	140.85	172.84	172.88	172.92	85.71	84.60	83.49	0.01515
1	5	1	10	140.84	173.00	173.04	173.08	81.26	80.15	79.04	0.01515
1	5	1	10	140.83	173.16	173.20	173.24	76.82	75.71	74.59	0.01515
1	5	1	10	140.82	173.32	173.36	173.40	72.37	71.26	70.15	0.01515
1	5	1	10	140.81	173.48	173.52	173.56	67.93	66.82	65.71	0.01515
1	4	1	10	140.39	181.68	181.73	181.77	204.33	203.25	202.16	0.01515
1	4	1	10	140.39	181.85	181.89	181.93	199.99	198.90	197.82	0.01515
1	4	1	10	140.38	182.01	182.05	182.09	195.64	194.55	193.47	0.01515
1	4	1	10	140.37	182.17	182.21	182.25	191.29	190.21	189.12	0.01515
1	4	1	10	140.36	182.33	182.37	182.41	186.95	185.86	184.77	0.01515
1	5	1	10	140.33	182.95	182.99	183.03	170.22	169.14	168.06	0.01515
1	5	1	10	140.32	183.11	183.15	183.19	165.89	164.80	163.72	0.01515
1	5	1	10	140.31	183.27	183.31	183.35	161.55	160.46	159.38	0.01515
1	5	1	10	140.31	183.43	183.48	183.52	157.21	156.13	155.04	0.01515
1	5	1	10	140.30	183.60	183.64	183.68	152.87	151.79	150.71	0.01515
1	4	1	10	139.87	192.00	192.04	192.08	289.65	288.60	287.54	0.01515
1	4	1	10	139.86	192.16	192.20	192.24	285.42	284.36	283.30	0.01515

1	4	1	10	139.86	192.32	192.36	192.40	281.19	280.13	279.07	0.01515
1	4	1	10	139.85	192.48	192.52	192.56	276.96	275.90	274.84	0.01515
1	4	1	10	139.84	192.64	192.68	192.72	272.73	271.67	270.61	0.01515
1	5	1	10	139.81	193.29	193.33	193.37	255.83	254.78	253.72	0.01515
1	5	1	10	139.80	193.45	193.49	193.53	251.61	250.56	249.50	0.01515
1	5	1	10	139.79	193.61	193.65	193.69	247.39	246.34	245.29	0.01515
1	5	1	10	139.78	193.77	193.81	193.85	243.18	242.12	241.07	0.01515
1	5	1	10	139.77	193.93	193.97	194.01	238.96	237.91	236.86	0.01515
1	4	1	10	139.33	202.69	202.73	202.77	13.13	12.10	11.08	0.01515
1	4	1	10	139.33	202.85	202.89	202.93	9.03	8.00	6.98	0.01515
1	4	1	10	139.32	203.01	203.05	203.09	4.93	3.90	2.88	0.01515
1	4	1	10	139.31	203.18	203.22	203.26	0.83	359.81	358.78	0.01515
1	4	1	10	139.30	203.34	203.38	203.42	356.73	355.71	354.69	0.01515
1	5	1	10	139.27	204.03	204.07	204.11	339.15	338.13	337.11	0.01515
1	5	1	10	139.26	204.19	204.23	204.27	335.06	334.04	333.02	0.01515
1	5	1	10	139.25	204.35	204.39	204.43	330.98	329.96	328.94	0.01515
1	5	1	10	139.24	204.51	204.55	204.59	326.90	325.88	324.86	0.01515
1	5	1	10	139.24	204.68	204.72	204.76	322.82	321.80	320.78	0.01515
2	4	16	2	135.37	283.94	284.07	284.20	340.86	338.29	335.73	0.06324
2	4	16	2	135.35	284.46	284.58	284.71	330.60	328.04	325.48	0.06324
2	5	16	2	135.29	285.60	285.73	285.86	307.91	305.36	302.81	0.06324
2	5	16	2	135.27	286.12	286.25	286.37	297.72	295.17	292.63	0.06324
2	5	3	2	134.91	293.87	293.90	293.92	147.26	146.80	146.34	0.01186
2	4	19	2	134.15	309.87	310.02	310.18	214.33	211.65	208.96	0.07510
2	4	19	2	134.12	310.48	310.64	310.79	203.60	200.93	198.25	0.07510
2	4	19	2	134.09	311.10	311.25	311.40	192.91	190.25	187.58	0.07510
2	5	19	2	134.03	312.53	312.69	312.84	168.02	165.38	162.74	0.07510
2	5	19	2	134.00	313.15	313.30	313.45	157.47	154.83	152.20	0.07510
2	5	19	2	133.97	313.76	313.91	314.06	146.95	144.33	141.71	0.07510
2	4	18	2	133.26	329.14	329.29	329.43	255.21	252.95	250.69	0.07115
2	4	18	2	133.23	329.72	329.87	330.02	246.18	243.93	241.68	0.07115
2	5	18	2	133.17	331.07	331.22	331.36	225.38	223.15	220.92	0.07115

2	5	18	2	133.14	331.65	331.80	331.94	216.46	214.24	212.02	0.07115
3	4	23	2	128.07	446.00	446.18	446.37	79.12	77.91	76.71	0.04582
3	4	23	2	128.03	446.74	446.92	447.11	74.30	73.11	71.91	0.04582
3	4	23	2	128.00	447.48	447.67	447.85	69.53	68.34	67.16	0.04582
3	5	23	2	127.93	449.12	449.31	449.50	59.10	57.94	56.78	0.04582
3	5	23	2	127.90	449.87	450.05	450.24	54.47	53.32	52.17	0.04582
3	5	23	2	127.87	450.61	450.79	450.98	49.88	48.74	47.61	0.04582
3	4	21	2	127.08	469.29	469.46	469.63	308.89	308.10	307.31	0.04183
3	4	21	2	127.05	469.97	470.14	470.31	305.74	304.96	304.18	0.04183
3	4	21	2	127.02	470.65	470.82	470.99	302.63	301.86	301.09	0.04183
3	4	21	2	126.99	471.32	471.49	471.66	299.56	298.80	298.04	0.04183
3	5	21	2	126.93	472.87	473.03	473.20	292.69	291.94	291.19	0.04183
3	5	21	2	126.90	473.54	473.71	473.88	289.71	288.97	288.23	0.04183
3	5	21	2	126.87	474.22	474.39	474.56	286.76	286.04	285.31	0.04183
3	5	21	2	126.84	474.90	475.07	475.24	283.87	283.16	282.44	0.04183
3	4	24	2	125.74	501.44	501.64	501.83	196.09	195.62	195.16	0.04781
3	4	24	2	125.70	502.22	502.41	502.61	194.25	193.79	193.34	0.04781
3	4	24	2	125.67	502.99	503.19	503.38	192.44	192.00	191.56	0.04781
3	4	24	2	125.64	503.77	503.96	504.15	190.68	190.24	189.81	0.04781
3	5	20	2	125.57	505.56	505.72	505.88	186.77	186.42	186.08	0.03984
3	5	20	2	125.54	506.20	506.36	506.52	185.41	185.07	184.74	0.03984
3	5	20	2	125.52	506.85	507.01	507.17	184.07	183.74	183.41	0.03984
3	5	20	2	125.49	507.49	507.65	507.81	182.75	182.42	182.10	0.03984
3	5	20	2	125.46	508.14	508.30	508.46	181.46	181.14	180.83	0.03984
4	4	23	2	124.26	537.65	537.84	538.03	149.61	149.58	149.54	0.04656
4	4	23	2	124.23	538.40	538.58	538.77	149.47	149.43	149.40	0.04656
4	4	23	2	124.20	539.14	539.32	539.51	149.34	149.31	149.28	0.04656
4	4	23	2	124.17	539.88	540.07	540.25	149.23	149.21	149.20	0.04656
4	4	23	2	124.14	540.62	540.81	540.99	149.17	149.16	149.15	0.04656
4	5	23	2	124.07	542.35	542.53	542.72	149.16	149.17	149.18	0.04656
4	5	23	2	124.04	543.09	543.27	543.46	149.21	149.23	149.25	0.04656
4	5	23	2	124.01	543.83	544.02	544.20	149.30	149.33	149.36	0.04656

4	5	23	2	123.98	544.57	544.76	544.94	149.41	149.44	149.48	0.04656
4	5	23	2	123.95	545.32	545.50	545.69	149.54	149.58	149.62	0.04656
4	4	22	2	122.57	579.77	579.95	580.13	191.26	191.66	192.05	0.04453
4	4	22	2	122.54	580.48	580.66	580.83	192.86	193.26	193.67	0.04453
4	4	22	2	122.52	581.19	581.37	581.54	194.48	194.89	195.31	0.04453
4	4	22	2	122.49	581.90	582.08	582.25	196.14	196.56	196.98	0.04453
4	4	22	2	122.46	582.61	582.79	582.96	197.83	198.25	198.68	0.04453
4	4	22	2	122.43	583.32	583.50	583.67	199.54	199.97	200.40	0.04453
4	5	22	2	122.36	585.13	585.31	585.49	204.05	204.50	204.96	0.04453
4	5	22	2	122.33	585.84	586.02	586.20	205.87	206.33	206.79	0.04453
4	5	22	2	122.30	586.55	586.73	586.91	207.72	208.19	208.65	0.04453
4	5	22	2	122.28	587.26	587.44	587.62	209.59	210.07	210.54	0.04453
4	5	22	2	122.25	587.97	588.15	588.33	211.49	211.98	212.46	0.04453
4	5	22	2	122.22	588.68	588.86	589.04	213.43	213.92	214.41	0.04453
8	4	22	2	112.69	847.59	847.77	847.95	148.21	151.03	153.85	0.05914
8	4	22	2	112.67	848.30	848.48	848.66	159.49	162.31	165.14	0.05914
8	4	22	2	112.64	849.01	849.19	849.37	170.79	173.62	176.46	0.05914
8	5	22	2	112.58	850.67	850.84	851.02	197.22	200.06	202.90	0.05914
8	5	22	2	112.56	851.38	851.55	851.73	208.59	211.43	214.28	0.05914
8	5	22	2	112.54	852.09	852.26	852.44	219.97	222.83	225.68	0.05914
8	4	21	2	111.90	870.89	871.06	871.23	170.26	173.12	175.99	0.05645
8	4	21	2	111.88	871.57	871.74	871.91	181.72	184.59	187.46	0.05645
8	4	21	2	111.85	872.25	872.42	872.58	193.21	196.09	198.97	0.05645
8	5	21	2	111.80	873.78	873.95	874.12	219.30	222.20	225.09	0.05645
8	5	21	2	111.78	874.46	874.62	874.79	230.87	233.77	236.67	0.05645
8	5	21	2	111.76	875.13	875.30	875.47	242.46	245.36	248.27	0.05645
8	4	19	2	111.17	892.79	892.94	893.09	191.75	194.50	197.24	0.05108
8	4	19	2	111.15	893.40	893.55	893.70	202.74	205.49	208.24	0.05108
8	4	19	2	111.13	894.01	894.16	894.32	213.75	216.50	219.26	0.05108
8	5	19	2	111.08	895.46	895.62	895.77	239.88	242.65	245.41	0.05108
8	5	19	2	111.06	896.08	896.23	896.38	250.95	253.71	256.48	0.05108
8	5	19	2	111.04	896.69	896.84	896.99	262.03	264.80	267.57	0.05108

9	4	19	2	107.09	967.24	967.39	967.54	324.93	328.92	332.91	0.07170
9	4	19	2	107.05	967.85	968.00	968.16	340.92	344.92	348.93	0.07170
9	5	19	2	106.95	969.26	969.42	969.57	17.98	22.03	26.08	0.07170
9	5	19	2	106.90	969.88	970.03	970.18	34.20	38.27	42.34	0.07170
9	4	21	2	105.71	986.25	986.41	986.58	131.96	136.98	142.01	0.07925
9	5	21	2	105.61	987.70	987.87	988.04	175.46	180.54	185.63	0.07925
9	4	22	2	104.81	998.57	998.74	998.92	153.79	159.49	165.19	0.08302
9	5	21	2	104.69	1000.08	1000.25	1000.42	202.63	208.10	213.58	0.07925
9	4	15	2	103.99	1009.72	1009.84	1009.96	160.11	164.17	168.23	0.05660
9	4	15	2	103.95	1010.20	1010.32	1010.45	176.35	180.41	184.47	0.05660
9	5	15	2	103.87	1011.35	1011.47	1011.59	214.84	218.92	222.99	0.05660
9	5	15	2	103.83	1011.83	1011.95	1012.07	231.15	235.23	239.31	0.05660
9	4	22	2	103.06	1022.28	1022.45	1022.63	228.72	234.88	241.04	0.08302
9	5	22	2	102.95	1023.81	1023.98	1024.16	282.01	288.19	294.38	0.08302
10	4	19	2	100.65	1055.67	1055.82	1055.98	355.33	1.09	6.86	0.08190
10	5	19	2	100.56	1056.99	1057.14	1057.29	44.85	50.64	56.43	0.08190
10	4	18	2	99.93	1065.90	1066.04	1066.19	25.43	31.05	36.67	0.07759
10	5	18	2	99.84	1067.17	1067.32	1067.46	74.82	80.45	86.09	0.07759
10	4	17	2	99.24	1075.77	1075.91	1076.05	53.36	58.82	64.29	0.07328
10	5	17	2	99.15	1077.01	1077.15	1077.28	102.62	108.10	113.59	0.07328
10	4	16	2	98.49	1086.69	1086.82	1086.95	136.31	141.64	146.97	0.06897
10	5	16	2	98.40	1087.86	1087.99	1088.12	184.70	190.05	195.40	0.06897
10	4	16	2	97.86	1095.87	1096.00	1096.13	161.46	166.96	172.46	0.06897
10	5	16	2	97.78	1097.01	1097.14	1097.27	210.02	215.54	221.06	0.06897
10	4	15	2	97.25	1104.83	1104.95	1105.07	189.04	194.35	199.67	0.06466
10	5	15	2	97.18	1105.93	1106.05	1106.18	237.60	242.94	248.27	0.06466
10	4	15	2	96.67	1113.54	1113.66	1113.78	216.45	221.91	227.36	0.06466
10	5	15	2	96.59	1114.63	1114.75	1114.87	265.59	271.06	276.53	0.06466
11	5	14	2	94.96	1139.51	1139.62	1139.73	350.25	355.71	1.18	0.06897
11	4	14	2	94.51	1146.47	1146.58	1146.69	330.15	335.72	341.28	0.06897
11	5	14	2	94.44	1147.45	1147.56	1147.68	18.68	24.26	29.84	0.06897
11	4	13	2	94.01	1154.30	1154.40	1154.51	359.93	5.20	10.48	0.06404

11	5	13	2	93.94	1155.27	1155.38	1155.48	49.06	54.34	59.63	0.06404
11	4	13	2	93.36	1164.51	1164.62	1164.72	160.07	165.48	170.88	0.06404
11	5	13	2	93.30	1165.46	1165.57	1165.67	209.16	214.57	219.99	0.06404
11	4	13	2	92.89	1171.95	1172.05	1172.16	186.41	191.90	197.40	0.06404
11	5	13	2	92.83	1172.88	1172.98	1173.08	235.07	240.58	246.09	0.06404
11	4	12	2	92.43	1179.31	1179.41	1179.50	215.65	220.81	225.97	0.05911
11	5	12	2	92.38	1180.22	1180.32	1180.42	264.31	269.48	274.66	0.05911
11	4	12	2	91.99	1186.46	1186.56	1186.66	240.56	245.81	251.07	0.05911
11	5	12	2	91.94	1187.36	1187.45	1187.55	289.24	294.51	299.78	0.05911
11	4	12	2	91.57	1193.47	1193.57	1193.66	264.49	269.84	275.19	0.05911
11	5	12	2	91.51	1194.34	1194.44	1194.54	312.68	318.03	323.40	0.05911
11	4	11	2	91.15	1200.36	1200.45	1200.53	288.22	293.21	298.20	0.05419
12	4	10	2	89.43	1229.18	1229.26	1229.34	147.99	152.71	157.43	0.02915
12	5	10	2	89.38	1229.96	1230.04	1230.12	193.27	197.99	202.71	0.02915
12	4	10	2	89.08	1235.24	1235.32	1235.40	142.57	147.29	152.02	0.02915
12	5	21	2	89.02	1236.08	1236.25	1236.41	191.70	201.62	211.54	0.06122
12	4	21	2	88.72	1241.32	1241.49	1241.66	138.55	148.46	158.36	0.06122
12	5	21	2	88.67	1242.06	1242.23	1242.40	181.93	191.84	201.74	0.06122
12	4	10	2	88.37	1247.48	1247.56	1247.64	138.38	143.07	147.78	0.02915
12	5	10	2	88.32	1248.24	1248.33	1248.41	183.02	187.71	192.41	0.02915
12	4	10	2	88.02	1253.57	1253.66	1253.74	132.85	137.53	142.20	0.02915
12	5	10	2	87.97	1254.34	1254.42	1254.50	177.27	181.94	186.61	0.02915
12	4	21	2	87.66	1259.69	1259.86	1260.03	126.41	136.18	145.95	0.06122
12	5	21	2	87.62	1260.44	1260.61	1260.78	169.65	179.42	189.19	0.06122
12	4	21	2	87.32	1265.69	1265.86	1266.03	111.74	121.46	131.19	0.06122
12	5	21	2	87.28	1266.44	1266.61	1266.78	154.81	164.52	174.25	0.06122
12	4	21	2	86.99	1271.61	1271.78	1271.95	91.51	101.20	110.89	0.06122
12	5	21	2	86.95	1272.36	1272.53	1272.69	133.94	143.63	153.32	0.06122
12	4	21	2	86.66	1277.48	1277.65	1277.82	66.50	76.15	85.82	0.06122
12	5	21	2	86.62	1278.21	1278.38	1278.55	108.34	118.00	127.66	0.06122
12	4	21	2	86.34	1283.32	1283.49	1283.66	39.64	49.28	58.92	0.06122
12	5	21	2	86.30	1284.06	1284.23	1284.40	81.39	91.02	100.65	0.06122

13	4	20	2	84.35	1320.07	1320.23	1320.39	317.20	326.28	335.36	0.04796
13	5	20	2	84.31	1320.79	1320.95	1321.11	357.61	6.69	15.77	0.04796
13	5	7	2	84.13	1324.28	1324.34	1324.39	194.14	197.32	200.49	0.01679
13	4	22	2	83.83	1329.83	1330.01	1330.18	145.78	155.73	165.67	0.05276
13	5	22	2	83.79	1330.61	1330.79	1330.97	189.63	199.57	209.51	0.05276
13	4	20	2	83.51	1336.07	1336.23	1336.39	134.86	143.85	152.83	0.04796
13	5	20	2	83.47	1336.79	1336.95	1337.11	174.86	183.85	192.83	0.04796
13	4	20	2	83.21	1341.79	1341.95	1342.11	92.58	101.51	110.43	0.04796
13	5	20	2	83.17	1342.50	1342.66	1342.82	131.86	140.77	149.69	0.04796
13	4	20	2	82.91	1347.50	1347.66	1347.82	47.31	56.16	65.00	0.04796
13	5	20	2	82.88	1348.21	1348.38	1348.54	86.65	95.48	104.31	0.04796
13	4	20	2	82.62	1353.21	1353.38	1353.54	359.24	7.99	16.73	0.04796
13	5	20	2	82.58	1353.93	1354.09	1354.25	38.13	46.86	55.58	0.04796
13	4	21	2	82.32	1358.97	1359.14	1359.31	309.38	318.44	327.49	0.05036
13	5	20	2	82.29	1359.70	1359.86	1360.02	348.17	356.78	5.38	0.04796
13	4	20	2	82.03	1364.75	1364.91	1365.07	255.78	264.26	272.74	0.04796
13	5	21	2	82.00	1365.46	1365.63	1365.80	293.51	302.41	311.30	0.05036
13	4	21	2	81.74	1370.54	1370.71	1370.87	198.04	206.80	215.55	0.05036
13	5	21	2	81.70	1371.26	1371.43	1371.60	235.55	244.29	253.02	0.05036
13	4	21	2	81.45	1376.36	1376.53	1376.70	136.82	145.43	154.04	0.05036
13	5	21	2	81.41	1377.09	1377.26	1377.43	174.11	182.70	191.30	0.05036
14	4	13	2	79.65	1413.03	1413.14	1413.24	131.61	136.62	141.63	0.03030
14	5	12	2	79.61	1413.97	1414.07	1414.16	176.29	180.91	185.53	0.02797
14	4	22	2	79.36	1419.07	1419.25	1419.43	59.77	68.22	76.67	0.05128
14	5	22	2	79.33	1419.84	1420.02	1420.19	96.26	104.71	113.16	0.05128
14	4	22	2	79.07	1425.19	1425.37	1425.55	351.05	359.48	7.91	0.05128
14	5	22	2	79.03	1425.96	1426.14	1426.32	27.45	35.88	44.32	0.05128
14	4	22	2	78.78	1431.40	1431.57	1431.75	285.47	293.88	302.29	0.05128
14	5	22	2	78.74	1432.17	1432.35	1432.52	322.17	330.57	338.97	0.05128
14	4	22	2	78.49	1437.64	1437.81	1437.99	220.71	229.09	237.46	0.05128
14	5	22	2	78.45	1438.42	1438.60	1438.77	257.62	265.99	274.36	0.05128
14	4	22	2	78.19	1443.91	1444.09	1444.27	155.91	164.23	172.54	0.05128

14	5	23	2	78.16	1444.69	1444.88	1445.06	192.57	201.26	209.94	0.05361
14	4	23	2	77.90	1450.22	1450.41	1450.60	90.77	99.39	108.01	0.05361
14	5	22	2	77.86	1451.02	1451.19	1451.37	127.48	135.71	143.94	0.05128
14	4	23	2	77.61	1456.60	1456.79	1456.97	25.76	34.29	42.82	0.05361
14	5	23	2	77.57	1457.40	1457.59	1457.77	62.46	70.98	79.50	0.05361
14	4	23	2	77.31	1463.07	1463.26	1463.44	321.40	329.83	338.26	0.05361
14	5	23	2	77.28	1463.88	1464.06	1464.25	358.03	6.44	14.86	0.05361
14	4	23	2	77.02	1469.58	1469.76	1469.95	255.11	263.43	271.74	0.05361
14	5	23	2	76.98	1470.39	1470.58	1470.76	291.58	299.88	308.18	0.05361
15	4	16	2	74.17	1535.16	1535.29	1535.42	148.55	153.76	158.98	0.07512
15	5	16	2	74.12	1536.27	1536.40	1536.53	193.55	198.77	203.99	0.07512
15	4	13	2	73.88	1542.25	1542.35	1542.46	75.30	79.54	83.77	0.06103
15	5	12	2	73.84	1543.18	1543.28	1543.38	113.07	116.97	120.87	0.05634
15	4	13	2	73.57	1549.63	1549.74	1549.84	11.57	15.72	19.87	0.06103
15	5	13	2	73.53	1550.56	1550.67	1550.77	48.28	52.42	56.57	0.06103
15	4	13	2	73.27	1557.05	1557.15	1557.26	302.07	306.12	310.17	0.06103
15	5	13	2	73.23	1557.97	1558.08	1558.18	337.80	341.83	345.86	0.06103
15	4	13	2	72.96	1564.54	1564.64	1564.75	226.24	230.14	234.04	0.06103
15	5	13	2	72.92	1565.47	1565.58	1565.68	261.01	264.89	268.78	0.06103
15	4	13	2	72.65	1572.12	1572.22	1572.33	144.98	148.82	152.66	0.06103
15	5	13	2	72.61	1573.07	1573.17	1573.28	179.79	183.63	187.47	0.06103
15	4	13	2	72.34	1579.82	1579.92	1580.03	63.12	66.84	70.55	0.06103
15	5	13	2	72.30	1580.78	1580.88	1580.99	97.17	100.90	104.62	0.06103
15	4	13	2	72.03	1587.61	1587.71	1587.82	338.52	342.19	345.86	0.06103
15	5	13	2	71.99	1588.58	1588.69	1588.79	12.63	16.29	19.95	0.06103
16	4	14	2	70.69	1622.29	1622.41	1622.52	118.28	122.24	126.20	0.06731
16	5	14	2	70.65	1623.33	1623.44	1623.55	154.51	158.48	162.45	0.06731
16	4	15	2	70.37	1630.66	1630.79	1630.91	52.11	56.34	60.57	0.07212
16	5	15	2	70.33	1631.72	1631.84	1631.96	89.06	93.29	97.52	0.07212
16	4	15	2	70.06	1639.16	1639.29	1639.41	348.54	352.69	356.85	0.07212
16	5	15	2	70.02	1640.24	1640.36	1640.48	25.33	29.49	33.64	0.07212
16	4	15	2	69.74	1647.74	1647.86	1647.98	283.62	287.81	292.00	0.07212

16	5	15	2	69.70	1648.81	1648.93	1649.05	320.83	325.04	329.24	0.07212
16	4	15	2	69.43	1656.44	1656.56	1656.68	225.68	229.82	233.96	0.07212
16	5	15	2	69.39	1657.53	1657.65	1657.77	262.81	266.92	271.03	0.07212
16	4	15	2	69.11	1665.13	1665.25	1665.37	150.51	154.43	158.36	0.07212
16	5	15	2	69.07	1666.22	1666.34	1666.46	185.83	189.75	193.67	0.07212
16	4	15	2	68.80	1673.94	1674.07	1674.19	76.16	80.09	84.02	0.07212
16	5	15	2	68.76	1675.05	1675.17	1675.29	112.04	115.97	119.90	0.07212
17	5	16	2	67.48	1711.94	1712.06	1712.19	238.79	242.97	247.15	0.06809
17	4	17	2	67.21	1720.11	1720.25	1720.39	142.22	146.58	150.94	0.07234
17	5	16	2	67.17	1721.31	1721.43	1721.56	180.12	184.21	188.29	0.06809
17	4	16	2	66.90	1729.51	1729.64	1729.76	72.19	76.06	79.93	0.06809
17	5	16	2	66.86	1730.68	1730.81	1730.93	107.34	111.24	115.12	0.06809
17	4	17	2	66.58	1739.01	1739.14	1739.28	0.35	4.61	8.87	0.07234
17	5	17	2	66.55	1740.20	1740.34	1740.47	37.48	41.74	46.00	0.07234
17	4	17	2	66.28	1748.53	1748.67	1748.80	294.62	298.75	302.87	0.07234
17	5	17	2	66.24	1749.72	1749.86	1750.00	330.36	334.43	338.51	0.07234
17	4	17	2	65.97	1758.26	1758.39	1758.53	220.95	224.94	228.93	0.07234
17	5	17	2	65.93	1759.46	1759.60	1759.74	256.14	260.13	264.11	0.07234
17	4	17	2	65.66	1768.10	1768.24	1768.38	145.33	149.24	153.14	0.07234
17	5	17	2	65.62	1769.33	1769.47	1769.61	180.35	184.24	188.11	0.07234
17	4	18	2	65.35	1778.05	1778.20	1778.34	67.62	71.78	75.94	0.07660
18	4	18	2	64.38	1810.44	1810.59	1810.73	282.55	286.66	290.77	0.07965
18	5	18	2	64.34	1811.74	1811.88	1812.03	319.20	323.28	327.35	0.07965
18	4	18	2	64.07	1820.79	1820.93	1821.08	213.16	217.26	221.36	0.07965
18	5	18	2	64.04	1822.08	1822.22	1822.37	249.62	253.72	257.83	0.07965
18	4	19	2	63.77	1831.34	1831.50	1831.65	153.58	157.93	162.27	0.08407
18	5	19	2	63.73	1832.66	1832.81	1832.96	190.81	195.15	199.48	0.08407
18	4	19	2	63.47	1842.06	1842.21	1842.37	95.90	100.19	104.47	0.08407
18	5	19	2	63.43	1843.40	1843.55	1843.70	133.25	137.52	141.78	0.08407
18	4	19	2	63.16	1852.98	1853.13	1853.28	35.69	39.83	43.96	0.08407
18	5	19	2	63.13	1854.34	1854.49	1854.64	72.50	76.66	80.82	0.08407
18	4	20	2	62.86	1864.13	1864.29	1864.45	342.21	346.68	351.16	0.08850

18	5	20	2	62.82	1865.52	1865.68	1865.84	20.74	25.23	29.72	0.08850
22	5	26	2	59.25	2006.62	2006.83	2007.04	192.71	198.24	203.76	0.11304
22	4	23	2	58.97	2018.51	2018.70	2018.89	133.29	137.88	142.48	0.10000
22	5	23	2	58.93	2020.08	2020.26	2020.45	171.97	176.55	181.13	0.10000
22	4	22	2	58.68	2031.04	2031.21	2031.39	84.51	88.96	93.42	0.09565
22	5	23	2	58.64	2032.58	2032.76	2032.95	123.22	127.89	132.57	0.10000
22	4	22	2	58.39	2043.54	2043.71	2043.89	42.82	47.39	51.96	0.09565
22	5	23	2	58.35	2045.08	2045.26	2045.45	82.21	86.92	91.62	0.10000
22	4	22	2	58.10	2056.04	2056.21	2056.39	356.81	1.36	5.90	0.09565
22	5	23	2	58.07	2057.58	2057.76	2057.95	36.33	41.10	45.87	0.10000
22	4	23	2	57.82	2068.56	2068.74	2068.93	315.36	320.03	324.70	0.10000
23	5	23	2	57.22	2095.71	2095.90	2096.08	255.04	259.58	264.12	0.09871
23	4	23	2	56.97	2106.88	2107.06	2107.25	159.83	164.14	168.44	0.09871
23	5	23	2	56.94	2108.48	2108.66	2108.85	196.85	201.14	205.44	0.09871
23	4	23	2	56.68	2120.33	2120.51	2120.70	112.16	116.52	120.88	0.09871
23	5	23	2	56.65	2121.93	2122.11	2122.30	149.80	154.19	158.57	0.09871
23	4	23	2	56.41	2133.10	2133.29	2133.47	51.90	56.22	60.52	0.09871
23	5	23	2	56.37	2134.70	2134.88	2135.07	89.02	93.35	97.67	0.09871
23	4	24	2	56.07	2149.08	2149.27	2149.46	62.02	66.40	70.77	0.10300
23	5	24	2	56.03	2150.71	2150.90	2151.09	98.64	102.94	107.25	0.10300
23	4	24	2	55.80	2162.12	2162.32	2162.51	346.44	350.60	354.75	0.10300
24	4	25	2	54.42	2229.27	2229.47	2229.67	288.90	292.68	296.46	0.08651
24	5	25	2	54.39	2231.01	2231.22	2231.42	321.64	325.44	329.24	0.08651
24	4	26	2	54.14	2243.38	2243.59	2243.80	196.31	200.29	204.27	0.08997
24	5	26	2	54.11	2245.17	2245.38	2245.59	230.23	234.20	238.16	0.08997
24	4	26	2	53.86	2257.67	2257.88	2258.09	102.55	106.46	110.38	0.08997
24	5	26	2	53.83	2259.46	2259.66	2259.87	135.89	139.83	143.77	0.08997
24	4	27	2	53.58	2272.33	2272.55	2272.77	17.21	21.29	25.36	0.09343
24	5	27	2	53.54	2274.16	2274.38	2274.60	51.47	55.55	59.65	0.09343
24	4	27	2	53.29	2287.36	2287.58	2287.80	302.62	306.66	310.69	0.09343
24	5	27	2	53.25	2289.24	2289.45	2289.67	337.20	341.21	345.21	0.09343
24	5	27	2	53.07	2298.60	2298.82	2299.03	148.02	151.97	155.93	0.09343

25	4	29	2	52.43	2332.74	2332.98	2333.21	20.81	24.97	29.14	0.11934
25	5	29	2	52.39	2334.72	2334.95	2335.19	55.95	60.10	64.22	0.11934
25	4	30	2	52.12	2348.92	2349.16	2349.40	300.84	304.92	309.00	0.12346
25	5	30	2	52.09	2350.95	2351.19	2351.44	335.00	339.05	343.10	0.12346
25	4	31	2	51.82	2365.44	2365.69	2365.94	212.51	216.52	220.53	0.12757
25	5	31	2	51.78	2367.53	2367.78	2368.03	245.91	249.89	253.87	0.12757
25	4	32	2	51.51	2382.40	2382.66	2382.92	118.52	122.47	126.42	0.13169
25	5	31	2	51.47	2384.56	2384.81	2385.06	151.51	155.31	159.12	0.12757
26	4	32	2	50.90	2416.68	2416.94	2417.20	296.94	301.06	305.19	0.12355
26	5	32	2	50.86	2418.83	2419.09	2419.34	331.24	335.36	339.48	0.12355
26	4	33	2	50.58	2434.35	2434.62	2434.88	220.17	224.44	228.71	0.12741
26	5	32	2	50.54	2436.58	2436.84	2437.09	255.85	259.98	264.11	0.12355
26	4	32	2	50.27	2452.02	2452.28	2452.54	140.46	144.45	148.44	0.12355
26	5	33	2	50.24	2454.21	2454.47	2454.74	174.16	178.24	182.32	0.12741
26	4	32	2	49.97	2469.66	2469.92	2470.18	43.88	47.65	51.42	0.12355
26	5	33	2	49.93	2471.85	2472.12	2472.38	75.95	79.87	83.80	0.12741
30	4	64	2	47.33	2628.83	2629.34	2629.86	23.19	31.43	39.67	0.14066
30	5	64	2	47.30	2630.97	2631.49	2632.00	57.39	65.58	73.77	0.14066
30	4	64	2	47.06	2645.97	2646.49	2647.00	291.92	299.87	307.80	0.14066
30	5	65	2	47.03	2648.11	2648.63	2649.16	324.77	332.80	340.82	0.14286
30	4	33	2	46.80	2663.22	2663.49	2663.75	193.89	197.89	201.88	0.07253
30	5	66	2	46.75	2665.70	2666.24	2666.77	231.08	239.00	246.92	0.14505
30	4	33	2	46.52	2680.75	2681.02	2681.28	91.83	95.71	99.57	0.07253
30	5	66	2	46.48	2683.24	2683.77	2684.30	127.83	135.48	143.14	0.14505
31	4	68	2	46.13	2706.29	2706.83	2707.38	120.93	130.12	139.36	0.15741
31	5	69	2	46.09	2708.55	2709.11	2709.67	159.18	168.64	178.13	0.15972
31	4	67	2	45.86	2724.21	2724.75	2725.29	58.80	67.52	76.22	0.15509
31	5	66	2	45.82	2726.42	2726.95	2727.49	94.36	102.89	111.40	0.15278
31	4	81	2	45.46	2750.65	2751.31	2751.96	116.35	126.75	137.15	0.18750
31	5	81	2	45.42	2753.32	2753.97	2754.62	158.79	169.24	179.70	0.18750
32	4	63	2	44.71	2801.17	2801.68	2802.19	243.34	252.15	260.95	0.12600
32	5	63	2	44.68	2803.25	2803.76	2804.27	279.35	288.12	296.89	0.12600

32	4	63	2	44.47	2817.84	2818.35	2818.85	166.10	174.40	182.69	0.12600
32	5	63	2	44.44	2819.92	2820.43	2820.94	200.02	208.32	216.62	0.12600
32	4	61	2	44.24	2834.05	2834.55	2835.04	74.50	82.68	90.85	0.12200
32	5	61	2	44.21	2836.09	2836.58	2837.07	108.22	116.41	124.58	0.12200
32	4	63	2	44.00	2850.84	2851.34	2851.85	349.15	357.21	5.26	0.12600
32	5	63	2	43.97	2852.92	2853.42	2853.93	22.09	30.11	38.11	0.12600
33	5	84	2	43.50	2886.10	2886.77	2887.45	179.05	189.56	200.09	0.17797
33	4	95	2	43.19	2907.89	2908.65	2909.42	160.16	172.47	184.81	0.20127
33	5	96	2	43.15	2911.01	2911.79	2912.56	210.64	223.20	235.82	0.20339
33	4	67	2	42.92	2927.73	2928.27	2928.81	129.69	138.82	147.94	0.14195
33	5	66	2	42.89	2929.94	2930.47	2931.00	167.00	175.96	184.90	0.13983
33	4	64	2	42.68	2945.23	2945.75	2946.26	50.83	58.72	66.61	0.13559
34	4	67	2	42.20	2980.49	2981.03	2981.57	213.27	221.34	229.44	0.12984
34	5	67	2	42.17	2982.70	2983.24	2983.78	246.51	254.73	263.01	0.12984
34	4	67	2	41.96	2998.44	2998.98	2999.52	139.19	148.16	157.15	0.12984
34	5	66	2	41.93	3000.65	3001.18	3001.71	175.97	184.87	193.77	0.12791
34	4	65	2	41.73	3015.85	3016.38	3016.90	66.58	75.10	83.63	0.12597
34	5	65	2	41.70	3018.00	3018.52	3019.05	101.45	109.93	118.43	0.12597
34	4	60	2	41.47	3034.97	3035.46	3035.94	13.03	20.68	28.32	0.11628
34	5	59	2	41.45	3036.96	3037.43	3037.91	44.38	51.90	59.42	0.11434
35	4	62	2	40.35	3122.10	3122.60	3123.10	268.96	276.30	283.62	0.12475
35	5	61	2	40.32	3124.15	3124.64	3125.14	299.01	306.23	313.46	0.12274
35	4	62	2	40.14	3138.58	3139.08	3139.58	151.30	158.72	166.15	0.12475
35	5	62	2	40.11	3140.63	3141.13	3141.63	181.75	189.07	196.39	0.12475
35	4	62	2	39.93	3155.16	3155.66	3156.16	15.80	22.08	28.39	0.12475
35	5	62	2	39.90	3157.23	3157.73	3158.23	42.02	48.42	54.85	0.12475
35	4	63	2	39.72	3171.83	3172.33	3172.84	242.92	249.98	257.02	0.12676
35	5	63	2	39.69	3173.91	3174.42	3174.93	271.79	278.76	285.72	0.12676
36	4	63	2	39.30	3205.52	3206.02	3206.53	343.75	350.88	358.01	0.12281
36	5	64	2	39.28	3207.61	3208.13	3208.65	13.19	20.43	27.68	0.12476
36	4	64	2	39.09	3222.48	3223.00	3223.52	220.69	227.88	235.07	0.12476
36	5	64	2	39.07	3224.60	3225.12	3225.64	250.25	257.45	264.65	0.12476

36	4	64	2	38.88	3239.59	3240.10	3240.62	99.35	106.48	113.62	0.12476
36	5	64	2	38.86	3241.72	3242.24	3242.76	128.91	136.05	143.17	0.12476
36	4	65	2	38.68	3256.79	3257.31	3257.84	327.42	333.86	340.29	0.12671
36	5	65	2	38.65	3258.93	3259.46	3259.98	353.72	0.14	6.54	0.12671
37	4	66	2	38.05	3309.03	3309.56	3310.09	328.33	335.55	342.76	0.12406
37	5	66	2	38.03	3311.21	3311.75	3312.28	357.89	5.05	12.19	0.12406
37	4	66	2	37.84	3326.66	3327.19	3327.72	203.08	210.11	217.13	0.12406
37	5	66	2	37.82	3328.86	3329.39	3329.92	232.20	239.27	246.36	0.12406
37	4	67	2	37.64	3344.38	3344.92	3345.46	81.79	89.25	96.72	0.12594
37	5	67	2	37.61	3346.60	3347.14	3347.68	112.48	119.99	127.50	0.12594
37	4	67	2	37.43	3362.23	3362.77	3363.31	339.01	347.32	355.66	0.12594
37	5	67	2	37.40	3364.46	3365.00	3365.54	13.38	21.75	30.12	0.12594
38	4	68	2	37.12	3388.90	3389.44	3389.99	31.50	40.01	48.52	0.12409
38	5	68	2	37.09	3391.15	3391.69	3392.24	66.36	74.82	83.29	0.12409
38	4	68	2	36.91	3407.02	3407.57	3408.12	307.39	315.30	323.18	0.12409
38	5	68	2	36.88	3409.29	3409.84	3410.39	339.92	347.73	355.52	0.12409
38	4	69	2	36.70	3425.26	3425.82	3426.38	197.84	205.15	212.48	0.12591
38	5	69	2	36.68	3427.55	3428.10	3428.66	227.88	235.22	242.57	0.12591
38	4	69	2	36.49	3443.62	3444.17	3444.73	80.73	88.04	95.33	0.12591
38	5	69	2	36.47	3445.92	3446.47	3447.03	110.80	118.04	125.28	0.12591
39	4	70	2	36.08	3480.65	3481.21	3481.78	224.18	232.42	240.67	0.12367
39	5	70	2	36.05	3482.96	3483.53	3484.09	258.02	266.29	274.58	0.12367
39	4	71	2	35.89	3497.67	3498.25	3498.82	118.31	127.05	135.80	0.12544
39	5	70	2	35.86	3500.01	3500.58	3501.14	154.09	162.72	171.34	0.12367
39	4	71	2	35.68	3516.48	3517.05	3517.62	37.66	45.73	53.74	0.12544
39	5	71	2	35.66	3518.83	3519.40	3519.97	70.43	78.31	86.14	0.12544
39	4	72	2	35.43	3539.52	3540.10	3540.68	336.71	343.77	350.84	0.12721
39	5	71	2	35.40	3541.89	3542.46	3543.03	5.55	12.54	19.56	0.12544
40	4	72	2	35.01	3577.77	3578.35	3578.93	112.07	119.53	126.98	0.12308
40	5	73	2	34.99	3580.16	3580.75	3581.34	142.81	150.37	157.94	0.12479
40	4	73	2	34.80	3597.06	3597.65	3598.24	14.00	22.65	31.32	0.12479
40	5	73	2	34.78	3599.48	3600.06	3600.65	49.50	58.19	66.89	0.12479

40	4	73	2	34.60	3616.50	3617.09	3617.68	303.76	312.11	320.44	0.12479
40	5	73	2	34.57	3618.93	3619.51	3620.10	338.09	346.38	354.66	0.12479
40	4	74	2	34.39	3636.05	3636.64	3637.24	228.97	237.86	246.74	0.12650
40	5	74	2	34.36	3638.49	3639.09	3639.68	265.28	274.10	282.93	0.12650
41	4	74	2	34.02	3671.42	3672.02	3672.61	17.18	25.86	34.48	0.12292
41	5	75	2	33.99	3673.88	3674.49	3675.09	52.62	61.23	69.77	0.12458
41	4	75	2	33.81	3691.32	3691.92	3692.52	291.57	300.09	308.62	0.12458
41	5	75	2	33.78	3693.80	3694.40	3695.01	326.62	335.20	343.77	0.12458
41	4	76	2	33.60	3711.32	3711.94	3712.55	215.18	223.83	232.46	0.12625
41	5	75	2	33.57	3713.82	3714.43	3715.03	250.33	258.80	267.25	0.12458
41	4	76	2	33.40	3730.65	3731.26	3731.88	125.07	133.84	142.63	0.12625
41	5	76	2	33.37	3733.17	3733.78	3734.39	161.13	169.90	178.68	0.12625
42	4	78	2	32.57	3812.47	3813.10	3813.73	143.42	150.27	157.09	0.16561
42	5	78	2	32.54	3815.05	3815.68	3816.31	171.45	178.30	185.16	0.16561
42	4	78	2	32.36	3833.25	3833.88	3834.51	36.09	44.48	52.82	0.16561
42	5	79	2	32.33	3835.84	3836.47	3837.11	70.27	78.55	86.78	0.16773
42	4	79	2	32.15	3854.15	3854.79	3855.42	304.07	312.23	320.38	0.16773
42	5	79	2	32.13	3856.76	3857.40	3858.04	337.48	345.59	353.68	0.16773
43	4	80	2	31.74	3896.35	3897.00	3897.64	44.07	50.28	56.59	0.16563
43	5	80	2	31.71	3898.99	3899.63	3900.28	70.16	76.85	83.65	0.16563
43	4	80	2	31.53	3917.64	3918.29	3918.93	297.85	307.73	317.78	0.16563
43	5	81	2	31.50	3920.29	3920.95	3921.60	339.58	350.17	0.85	0.16770
43	4	81	2	31.32	3939.07	3939.73	3940.38	259.76	268.75	277.66	0.16770
43	5	81	2	31.29	3941.74	3942.39	3943.05	295.95	304.62	313.28	0.16770
44	4	82	2	30.90	3982.32	3982.98	3983.64	174.17	184.11	194.10	0.16532
44	5	82	2	30.88	3985.03	3985.69	3986.35	215.26	225.46	235.77	0.16532
44	4	83	2	30.71	4002.64	4003.31	4003.98	154.68	166.56	178.47	0.16734
44	5	83	2	30.68	4005.36	4006.03	4006.70	203.08	214.94	226.71	0.16734
44	4	83	2	30.50	4024.60	4025.27	4025.94	169.43	180.19	190.92	0.16734
44	5	83	2	30.47	4027.34	4028.01	4028.68	213.27	223.87	234.43	0.16734
45	4	84	2	30.08	4068.92	4069.60	4070.28	94.56	103.80	113.04	0.16535
45	5	84	2	30.06	4071.71	4072.38	4073.06	132.51	141.75	150.99	0.16535

45	4	85	2	29.88	4091.29	4091.97	4092.66	43.54	53.04	62.49	0.16732
45	5	85	2	29.85	4094.08	4094.76	4095.45	81.94	91.30	100.63	0.16732
45	4	85	2	29.67	4113.79	4114.48	4115.16	345.78	354.81	3.81	0.16732
45	5	85	2	29.64	4116.61	4117.29	4117.98	22.69	31.60	40.47	0.16732
46	4	86	2	29.25	4159.25	4159.94	4160.64	150.42	156.81	163.22	0.16538
46	5	86	2	29.22	4162.10	4162.79	4163.48	176.73	183.19	189.66	0.16538
46	4	87	2	29.04	4182.18	4182.88	4183.58	30.07	38.35	46.67	0.16731
46	5	87	2	29.02	4185.04	4185.74	4186.44	64.01	72.36	80.72	0.16731
46	4	87	2	28.83	4205.27	4205.97	4206.67	315.01	323.76	332.53	0.16731
46	5	87	2	28.81	4208.14	4208.85	4209.55	351.01	359.84	8.67	0.16731
47	4	88	2	28.41	4251.86	4252.57	4253.28	184.14	192.76	201.35	0.16449
47	5	89	2	28.39	4254.77	4255.49	4256.21	219.33	227.93	236.49	0.16636
47	4	89	2	28.21	4275.39	4276.11	4276.83	97.64	106.03	114.43	0.16636
47	5	89	2	28.18	4278.33	4279.04	4279.76	132.08	140.50	148.96	0.16636
47	4	90	2	28.00	4299.05	4299.78	4300.50	19.58	27.97	36.22	0.16822
47	5	90	2	27.97	4302.00	4302.73	4303.45	52.87	60.72	68.42	0.16822
48	4	91	2	27.58	4346.82	4347.55	4348.29	135.68	143.82	152.00	0.16606
48	5	91	2	27.55	4349.81	4350.54	4351.28	168.97	177.17	185.35	0.16606
48	4	91	2	27.37	4370.93	4371.66	4372.40	35.01	42.62	50.21	0.16606
48	5	91	2	27.34	4373.94	4374.67	4375.40	66.06	73.56	81.06	0.16606
48	4	92	2	27.16	4395.19	4395.93	4396.67	280.91	288.77	296.65	0.16788
48	5	92	2	27.13	4398.22	4398.96	4399.70	313.14	321.09	329.07	0.16788
50	4	128	2	23.31	4866.34	4867.37	4868.40	257.99	269.31	280.71	0.24903
50	5	128	2	23.28	4870.54	4871.57	4872.60	304.49	316.03	327.57	0.24903
50	4	129	2	23.05	4899.97	4901.01	4902.05	247.38	257.82	268.32	0.25097
50	5	129	2	23.02	4904.19	4905.23	4906.27	290.02	300.62	311.26	0.25097
51	4	132	2	20.74	5208.94	5210.01	5211.07	178.70	189.62	200.49	0.24906
51	5	132	2	20.71	5213.27	5214.33	5215.39	222.71	233.43	244.12	0.24906
51	4	133	2	20.48	5243.80	5244.88	5245.95	152.00	161.42	170.84	0.25094
51	5	133	2	20.45	5248.14	5249.21	5250.29	190.03	199.43	208.84	0.25094
54	4	131	2	17.08	5736.83	5737.88	5738.94	303.53	313.52	323.53	0.25586
54	5	131	2	17.05	5741.12	5742.17	5743.23	344.12	354.10	4.09	0.25586

54	4	125	2	16.86	5769.73	5770.73	5771.74	251.06	260.46	269.85	0.24414
54	5	125	2	16.83	5773.81	5774.82	5775.82	289.05	298.43	307.81	0.24414
55	4	117	2	14.87	6078.19	6079.14	6080.08	294.88	303.61	312.35	0.24841
55	5	118	2	14.85	6082.04	6082.99	6083.94	330.58	339.46	348.33	0.25053
55	4	118	2	14.68	6109.21	6110.16	6111.11	225.15	234.27	243.42	0.25053
55	5	118	2	14.65	6113.06	6114.01	6114.96	262.35	271.65	280.98	0.25053
56	4	124	2	12.72	6428.57	6429.57	6430.57	272.99	282.11	291.23	0.24900
56	5	124	2	12.70	6432.64	6433.64	6434.64	310.05	319.09	328.13	0.24900
56	4	125	2	12.53	6461.37	6462.37	6463.38	200.74	209.05	217.31	0.25100
56	5	125	2	12.50	6465.46	6466.47	6467.48	234.10	242.13	250.09	0.25100
57	4	131	2	10.76	6764.38	6765.44	6766.49	161.61	170.54	179.46	0.25000
57	5	131	2	10.73	6768.66	6769.72	6770.78	197.68	206.47	215.23	0.25000
57	4	131	2	10.56	6798.75	6799.81	6800.86	75.79	83.69	91.55	0.25000
57	5	131	2	10.54	6803.04	6804.10	6805.15	107.57	115.29	122.99	0.25000
58	4	136	2	8.99	7079.76	7080.86	7081.96	198.31	206.37	214.43	0.25000
58	5	136	2	8.96	7084.20	7085.29	7086.39	230.80	238.80	246.79	0.25000
58	4	136	2	8.79	7115.64	7116.74	7117.83	100.61	109.41	118.28	0.25000
58	5	136	2	8.76	7120.10	7121.20	7122.29	136.77	145.77	154.79	0.25000
59	4	141	2	7.21	7407.85	7408.99	7410.13	117.70	125.77	133.86	0.24912
59	5	141	2	7.19	7412.48	7413.61	7414.75	150.51	158.60	166.67	0.24912
59	4	142	2	7.01	7445.01	7446.15	7447.30	28.87	37.41	45.94	0.25088
59	5	142	2	6.99	7449.64	7450.79	7451.93	63.35	71.85	80.42	0.25088
60	4	146	2	5.44	7747.67	7748.84	7750.02	107.25	115.09	122.93	0.25000
60	5	146	2	5.41	7752.43	7753.61	7754.79	138.93	146.71	154.49	0.25000
60	4	146	2	5.24	7785.99	7787.16	7788.34	4.66	12.67	20.67	0.25000
60	5	146	2	5.22	7790.77	7791.94	7793.12	37.07	44.99	52.89	0.25000
59	8	141	2	7.31	7389.32	7390.46	7391.60	343.73	352.02	0.36	0.50000
59	8	141	2	7.11	7426.32	7427.46	7428.60	249.96	258.29	266.64	0.50000
60	8	146	2	5.54	7728.50	7729.67	7730.85	335.54	343.78	352.03	0.50000
60	8	146	2	5.34	7766.73	7767.91	7769.08	233.81	241.71	249.66	0.50000

7. Fringe pattern at three temperatures

The table below contains the fringe pattern recorded from the three descent calibrations of the IR spectrometer.

Pixel	T=264.322	T=259.399	T=251.661
7	0.985	0.984	0.982
8	0.990	0.991	0.991
9	0.996	1.000	1.002
10	1.003	1.009	1.013
11	1.012	1.014	1.017
12	1.022	1.016	1.013
13	1.016	1.012	1.010
14	1.011	1.006	1.003
15	1.015	1.011	1.009
16	0.997	0.997	0.998
17	0.995	0.993	0.992
18	0.976	0.977	0.979
19	0.986	0.987	0.989
20	0.991	0.995	0.998
21	1.000	1.002	1.001
22	0.999	1.000	0.996
23	0.982	0.989	0.993
24	1.000	1.000	1.001
25	1.032	1.022	1.012
26	1.009	1.008	1.007
27	0.997	0.998	0.999
28	0.982	0.985	0.987
29	0.987	0.988	0.988
30	1.007	1.004	1.001
31	1.010	1.010	1.010
32	1.000	1.003	1.005
33	0.980	0.988	0.993
34	0.975	0.981	0.986
35	0.992	0.992	0.994
36	1.013	1.009	1.009

37	1.022	1.018	1.018
38	1.009	1.010	1.011
39	1.000	0.999	0.996
40	0.974	0.978	0.982
41	0.980	0.981	0.984
42	1.014	1.007	1.004
43	1.026	1.020	1.017
44	1.021	1.019	1.017
45	0.999	1.001	1.005
46	0.982	0.988	0.992
47	0.973	0.977	0.981
48	0.988	0.987	0.988
49	1.021	1.015	1.011
50	1.037	1.032	1.027
51	1.034	1.031	1.028
52	1.015	1.017	1.015
53	0.990	0.997	0.999
54	0.975	0.983	0.986
55	1.000	0.995	0.986
56	1.002	0.997	0.994
57	1.019	1.013	1.010
58	1.042	1.033	1.025
59	1.029	1.025	1.022
60	1.006	1.007	1.008
61	0.977	0.985	0.990
62	0.971	0.977	0.980
63	0.951	0.960	0.970
64	0.984	0.982	0.982
65	0.987	0.987	0.988
66	1.016	1.009	1.005
67	1.018	1.014	1.011
68	1.013	1.011	1.010
69	0.997	0.999	1.000
70	0.982	0.986	0.990
71	0.972	0.977	0.981

72	0.973	0.977	0.980
73	0.981	0.982	0.983
74	0.992	0.990	0.990
75	1.002	0.999	0.998
76	1.017	1.013	1.009
77	1.015	1.012	1.009
78	1.014	1.012	1.009
79	0.997	0.999	0.998
80	0.980	0.986	0.987
81	0.966	0.973	0.977
82	0.967	0.972	0.977
83	0.983	0.988	0.991
84	1.012	1.014	1.014
85	1.031	1.032	1.032
86	1.040	1.034	1.030
87	1.026	1.026	1.026
88	1.045	1.039	1.033
89	1.045	1.045	1.043
90	1.027	1.028	1.031
91	1.026	1.029	1.030
92	0.999	1.005	1.008
93	0.980	0.987	0.992
94	0.969	0.972	0.975
95	0.972	0.971	0.972
96	0.992	0.984	0.973
97	0.964	0.964	0.966
98	0.969	0.965	0.964
99	0.971	0.967	0.967
100	0.985	0.980	0.978
101	1.011	1.004	0.998
102	1.017	1.008	1.004
103	1.022	1.017	1.014
104	1.016	1.013	1.011
105	1.014	1.014	1.011
106	0.985	0.994	1.001

107	1.004	1.007	1.010
108	1.014	1.011	1.013
109	1.028	1.021	1.018
110	1.028	1.022	1.019
111	0.904	0.954	0.979
112	1.009	1.007	1.007
113	1.004	1.000	1.000
114	0.998	0.993	0.991
115	1.006	1.000	0.996
116	1.010	1.004	0.999

For pixels beyond 116, the fringe pattern is small, and factors of unity in the above table are to be used. Interpolation or extrapolation from the above table to the optics temperature of interest gives the expected fringe pattern. Division of the intensity spectrum from the data by the fringe pattern gives the corrected intensity spectrum without fringes.