

Příloha 3: Vstupní data pro teplotní analýzu komůrky v programu Abaqus

IMEP: 17 bar
 Otáčky: 2400 1/min

Objekt: Komůrka

Objekt: Válec

Alfa [°]	Čas [s]	p_abs [bar]	Teplota [K]	Heat transfer coefficient [Wm ⁻² K ⁻¹]	p_abs [bar]	Teplota [K]	Heat transfer coefficient [Wm ⁻² K ⁻¹]
-100	0	2,54161	746,54144	1947,2974	2,5516205	410,9991	187,71591
-99	6,94E-05	2,5763612	745,7575	1926,4233	2,5870802	412,70575	189,62318
-98	0,000139	2,6124885	744,9736	1905,5493	2,6237042	414,41238	191,53046
-97	0,000208	2,6494796	744,1801	1884,8162	2,6615355	416,14853	193,48088
-96	0,000278	2,6881351	743,3697	1864,395	2,700618	417,94397	195,51938
-95	0,000347	2,728	742,5517	1844,1422	2,7409983	419,771	197,60568
-94	0,000417	2,7690253	741,7263	1824,0576	2,782724	421,6296	199,73972
-93	0,000486	2,8115125	740,8869	1804,302	2,8258433	423,54962	201,9683
-92	0,000556	2,8553874	740,04175	1784,7467	2,870409	425,50513	204,25252
-91	0,000625	2,9007258	739,1912	1765,3809	2,9164765	427,49432	206,58961
-90	0,000694	2,947609	738,3317	1746,3672	2,9641066	429,54715	209,0284
-89	0,000764	2,9960642	737,4687	1727,5803	3,0133636	431,6397	211,53181
-88	0,000833	3,0461774	736,6027	1708,9988	3,0643165	433,76816	214,09387
-87	0,000903	3,0980196	735,73413	1690,7943	3,1170366	435,96277	216,76581
-86	0,000972	3,1516564	734,8654	1672,8413	3,1716015	438,20157	219,51254
-85	0,001042	3,2071733	733,997	1655,1067	3,2280922	440,47864	222,32436
-84	0,001111	3,2646494	733,1327	1637,7693	3,2865918	442,8247	225,25554
-83	0,001181	3,3241677	732,2733	1620,7086	3,347188	445,21957	228,27286
-82	0,00125	3,385818	731,4187	1603,8801	3,4099705	447,65533	231,36278
-81	0,001319	3,4496896	730,57544	1587,4614	3,4750328	450,16315	234,58263
-80	0,001389	3,5158753	729,7437	1571,3455	3,5424695	452,72473	237,9017
-79	0,001458	3,5844717	728,92206	1555,4752	3,6123812	455,3301	241,30202
-78	0,001528	3,6555796	728,12024	1540,0226	3,6848714	458,01038	244,8437
-77	0,001597	3,7293062	727,3378	1524,8983	3,7600503	460,7501	248,50009

-76	0,001667	3,8057601	726,5716	1510,0311	3,838031	463,53662	252,24757
-75	0,001736	3,885058	725,83496	1495,5868	3,9189343	466,40103	256,14893
-74	0,001806	3,9673243	725,127	1481,4945	4,002888	469,3311	260,18323
-73	0,001875	4,0526953	724,44214	1467,6683	4,0900345	472,31116	264,3197
-72	0,001944	4,1413164	723,7975	1454,2687	4,180524	475,37222	268,62427
-71	0,002014	4,233343	723,1927	1441,2424	4,274516	478,5056	273,0826
-70	0,002083	4,3289375	722,61847	1428,4893	4,3721795	481,69232	277,6556
-69	0,002153	4,4282784	722,0959	1416,1652	4,473692	484,96365	282,41342
-68	0,002222	4,5315514	721,62573	1404,2328	4,579241	488,31406	287,34845
-67	0,002292	4,638941	721,19464	1392,5796	4,689021	491,7213	292,4125
-66	0,002361	4,7506385	720,8271	1381,3563	4,8032384	495,21716	297,68057
-65	0,002431	4,8668504	720,5259	1370,5411	4,922106	498,79907	303,15247
-64	0,0025	4,9877973	720,273	1360,0104	5,0458474	502,44168	308,7701
-63	0,002569	5,1136994	720,096	1349,9076	5,1746907	506,1767	314,61295
-62	0,002639	5,244788	720,0006	1340,228	5,3088756	510,00543	320,6907
-61	0,002708	5,381309	719,9633	1330,8375	5,4486547	513,8989	326,93347
-60	0,002778	5,523524	720,0141	1321,87	5,594298	517,88837	333,42422
-59	0,002847	5,671703	720,1632	1313,3407	5,746086	521,97974	340,18674
-58	0,002917	5,826138	720,3804	1305,1035	5,90432	526,13995	347,136
-57	0,002986	5,987135	720,6977	1297,2823	6,069316	530,3994	354,35828
-56	0,003056	6,1550303	721,131	1289,9132	6,2414203	534,7695	361,89496
-55	0,003125	6,3301826	721,64185	1282,8364	6,421001	539,21216	369,64246
-54	0,003194	6,51297	722,264	1276,1682	6,608452	543,7577	377,6922
-53	0,003264	6,703794	723,01556	1269,9514	6,8041835	548,42194	386,10358
-52	0,003333	6,903077	723,85223	1264,0205	7,008633	553,1625	394,75262
-51	0,003403	7,1112604	724,8091	1258,4839	7,222251	558,00946	403,73795
-50	0,003472	7,328806	725,9133	1253,406	7,4455147	562,9824	413,13632
-49	0,003542	7,5561986	727,113	1248,6158	7,67892	568,0353	422,80295
-48	0,003611	7,793945	728,4449	1244,2179	7,9229865	573,1975	432,84277
-47	0,003681	8,042563	729,942	1240,2881	8,178256	578,4923	443,35315
-46	0,00375	8,302583	731,5444	1236,6483	8,445283	583,8699	454,16577
-45	0,003819	8,574593	733,289	1233,395	8,724646	589,35834	465,38904
-44	0,003889	8,859191	735,21606	1230,6187	9,016951	594,9849	477,1476

-43	0,003958	9,156995	737,2569	1228,1326	9,322832	600,6961	489,24457
-42	0,004028	9,468664	739,44745	1226,0238	9,6429615	606,5176	501,78928
-41	0,004097	9,794895	741,83563	1224,398	9,978043	612,4808	514,93933
-40	0,004167	10,1364155	744,34375	1223,059	10,328816	618,52814	528,4637
-39	0,004236	10,494001	747,00604	1222,0862	10,696063	624,6829	542,4735
-38	0,004306	10,868463	749,87427	1221,5903	11,080603	630,97833	557,15735
-37	0,004375	11,260647	752,8661	1221,375	11,483281	637,3549	572,2488
-36	0,004444	11,671433	756,01605	1221,5154	11,904975	643,834	587,86334
-35	0,004514	12,10172	759,37946	1222,13	12,34658	650,44666	604,211
-34	0,004583	12,552423	762,86633	1223,0161	12,809	657,13416	620,9942
-33	0,004653	13,024469	766,5086	1224,2426	13,293148	663,9146	638,3306
-32	0,004722	13,518791	770,35944	1225,9215	13,799931	670,81366	656,4417
-31	0,004792	14,03632	774,3283	1227,8558	14,330249	677,77637	675,00494
-30	0,004861	14,577977	778,44293	1230,1052	14,884979	684,816	694,132
-29	0,004931	15,144666	782,75165	1232,7751	15,464974	691,9487	714,0466
-28	0,005	15,737256	787,1665	1235,6771	16,071033	699,1271	734,408
-27	0,005069	16,35657	791,70856	1238,8583	16,703905	706,358	755,3119
-26	0,005139	17,003384	796,4169	1242,4132	17,364277	713,6424	776,96716
-25	0,005208	17,678432	801,21	1246,1656	18,052774	720,94543	799,0269
-24	0,005278	18,38238	806,102	1250,1505	18,769936	728,2667	821,56445
-23	0,005347	19,1158	811,5757	1255,0704	19,516197	735,5836	844,73315
-22	0,005417	19,879143	820,42267	1265,0737	20,291842	742,8839	868,22644
-21	0,005486	20,672699	833,9646	1282,1426	21,096975	750,1614	892,07855
-20	0,005556	21,496565	860,14215	1319,0964	21,931467	757,3812	916,42755
-19	0,005625	22,350573	893,5353	1367,4884	22,794937	764,55475	952,69385
-18	0,005694	23,234179	935,4492	1429,407	23,686676	771,6705	1005,7358
-17	0,005764	24,157799	991,49786	1512,9703	24,592628	778,63416	1057,254
-16	0,005833	25,245384	1054,1504	1606,76	25,537296	785,7594	1104,5287
-15	0,005903	26,447342	1124,238	1712,0948	26,507278	793,13165	1146,0349
-14	0,005972	27,593718	1202,7898	1830,409	27,502174	803,1671	1176,3074
-13	0,006042	28,533817	1284,4172	1953,0881	28,520624	815,3023	1203,7338
-12	0,006111	29,689383	1369,2358	2080,182	29,55592	829,98413	1228,6096
-11	0,006181	30,870527	1455,6157	2207,81	30,605211	849,57526	1253,1298

-10	0,00625	31,89822	1541,1687	2332,6946	31,533207	872,0535	1280,195
-9	0,006319	33,075756	1625,464	2453,8918	32,623158	897,84015	1310,6656
-8	0,006389	34,243095	1704,402	2563,3337	33,780693	929,21844	1357,6748
-7	0,006458	35,430668	1780,3076	2665,9001	35,027493	963,58813	1418,9783
-6	0,006528	36,68415	1852,7671	2760,616	36,380295	1001,3289	1497,3403
-5	0,006597	38,02835	1918,8693	2841,5715	37,852493	1044,3275	1587,5183
-4	0,006667	39,512493	1981,2196	2915,3083	39,454308	1089,8823	1683,5348
-3	0,006736	41,15946	2039,2402	2980,8542	41,192932	1138,3022	1786,1127
-2	0,006806	42,9782	2089,5657	3033,887	43,069405	1190,7339	1897,4584
-1	0,006875	44,947067	2135,7314	3080,911	45,058464	1244,945	2012,144
0	0,006944	47,00615	2177,125	3121,178	47,148705	1301,127	2130,4067
1	0,007014	49,175457	2211,0774	3152,1436	49,331753	1359,6544	2250,7214
2	0,007083	51,41848	2241,178	3178,6978	51,589115	1419,0796	2370,2854
3	0,007153	53,708134	2267,2515	3200,7136	53,886482	1479,3855	2488,7334
4	0,007222	56,01507	2287,0212	3216,2024	56,209057	1540,3922	2600,8198
5	0,007292	58,332825	2303,6545	3228,6453	58,541824	1601,3585	2707,161
6	0,007361	60,646355	2317,1404	3238,0642	60,870052	1662,1841	2807,1113
7	0,007431	62,94281	2326,2793	3243,4705	63,179127	1722,2622	2894,8276
8	0,0075	65,2065	2332,3674	3246,144	65,45477	1781,2728	2971,0164
9	0,007569	67,42659	2335,9724	3246,6067	67,68312	1839,1827	3036,808
10	0,007639	69,58933	2336,8699	3244,6738	69,8508	1895,6224	3090,0806
11	0,007708	71,681465	2334,452	3239,8176	71,944984	1949,6088	3125,9482
12	0,007778	73,691284	2329,9277	3233,095	73,95352	2001,6846	3150,0745
13	0,007847	75,60662	2323,3376	3224,5352	75,86492	2051,731	3162,5063
14	0,007917	77,41675	2314,0972	3213,5972	77,66854	2098,786	3159,6536
15	0,007986	79,11108	2302,4756	3200,4907	79,35461	2142,7485	3144,3242
16	0,008056	80,536476	2289,3193	3185,8965	80,8001	2184,153	3122,6604
17	0,008125	81,97939	2274,8333	3169,9534	82,10522	2222,9573	3096,408
18	0,008194	83,199646	2258,8052	3152,285	83,31456	2257,3818	3056,0527
19	0,008264	84,434326	2241,8818	3133,5986	84,41526	2288,9197	3007,734
20	0,008333	85,25378	2224,1377	3113,9727	85,478035	2317,694	2952,3254
21	0,008403	86,53973	2205,3818	3093,1716	86,31898	2342,7825	2888,6702
22	0,008472	87,07484	2185,7097	3071,2783	87,00377	2364,114	2818,6924

23	0,008542	87,48501	2165,4324	3048,6587	87,54918	2382,8203	2745,0415
24	0,008611	87,996315	2144,491	3025,2393	87,97718	2398,5488	2667,7107
25	0,008681	88,09965	2122,664	3000,718	88,27042	2410,2273	2586,716
26	0,00875	88,381226	2100,4185	2975,6614	88,402374	2419,667	2504,6455
27	0,008819	88,37036	2077,7285	2950,0315	88,410034	2426,623	2421,646
28	0,008889	88,113625	2054,5186	2923,6042	88,27457	2429,9531	2338,0042
29	0,008958	88,00666	2031,0693	2896,8198	88,04042	2431,4895	2254,8
30	0,009028	87,5691	2007,3446	2869,6267	87,66101	2430,9253	2172,308
31	0,009097	87,14128	1983,364	2841,9307	87,13602	2427,516	2091,811
32	0,009167	86,73968	1959,2966	2814,0159	86,70103	2422,7236	2012,6721
33	0,009236	86,111145	1935,1393	2785,852	86,002174	2416,299	1935,2616
34	0,009306	85,329956	1910,9403	2757,4282	85,21023	2407,7727	1861,0262
35	0,009375	84,42451	1886,7444	2728,9048	84,284546	2398,2383	1788,6727
36	0,009444	83,46045	1862,5612	2700,2742	83,28904	2387,5205	1718,666
37	0,009514	82,37446	1838,525	2671,605	82,211426	2375,4692	1652,2516
38	0,009583	81,19913	1814,5894	2642,9485	81,022804	2362,8035	1587,9006
39	0,009653	79,99279	1790,7839	2614,3196	79,795074	2349,4272	1526,1115
40	0,009722	78,657555	1767,254	2585,825	78,46837	2335,2964	1467,9336
41	0,009792	77,33925	1743,8967	2557,4421	77,118645	2320,842	1411,7479
42	0,009861	75,89041	1720,7623	2529,2131	75,68335	2306,0217	1358,0402
43	0,009931	74,47821	1697,9978	2501,2708	74,240364	2290,882	1307,7181
44	0,01	72,99203	1675,4609	2473,5195	72,76025	2275,6309	1259,231
45	0,010069	71,49724	1653,225	2446,0256	71,2522	2260,2668	1213,0659
46	0,010139	69,96935	1631,4323	2418,9373	69,72024	2244,8796	1169,8506
47	0,010208	68,42906	1609,8221	2391,9478	68,17268	2229,522	1128,16
48	0,010278	66,82907	1588,4152	2365,0188	66,57675	2214,2249	1088,3934
49	0,010347	65,279655	1567,3158	2338,1965	65,01124	2199,0857	1051,3903
50	0,010417	63,708694	1546,4697	2311,592	63,444138	2184,0618	1015,8205
51	0,010486	62,14454	1526,009	2285,3765	61,879364	2169,2068	982,0604
52	0,010556	60,596157	1506,0409	2259,6755	60,324577	2154,606	950,4111
53	0,010625	59,00461	1486,3676	2234,289	58,74519	2140,1675	919,95435
54	0,010694	57,490097	1467,0946	2209,3342	57,217724	2125,9568	891,0702
55	0,010764	55,932594	1448,3151	2184,9238	55,673897	2112,0447	863,9466

56	0,010833	54,448463	1429,8276	2160,841	54,18469	2098,3154	837,82605
57	0,010903	52,98346	1411,7393	2137,21	52,720688	2084,8408	813,0438
58	0,010972	51,494514	1394,1255	2114,1267	51,248955	2071,6758	789,7231
59	0,011042	50,101234	1376,7968	2091,376	49,841473	2058,6982	767,2405
60	0,011111	48,66787	1359,8689	2069,0955	48,43054	2045,9861	745,90076
61	0,011181	47,32937	1343,3923	2047,3538	47,084087	2033,5747	725,7629
62	0,01125	45,969177	1327,1914	2025,9437	45,739758	2021,3467	706,32776
63	0,011319	44,68953	1311,3903	2005,0168	44,458782	2009,3837	687,8776
64	0,011389	43,43372	1296,0122	1984,6088	43,210938	1997,703	670,4103
65	0,011458	42,211754	1280,8989	1964,5273	41,997368	1986,1979	653,5357
66	0,011528	41,029972	1266,1776	1944,9315	40,81903	1974,9514	637,5104
67	0,011597	39,876537	1251,8519	1925,8314	39,674675	1963,9694	622,2917
68	0,011667	38,76279	1237,78	1907,0507	38,56559	1953,1564	607,5761
69	0,011736	37,678486	1224,0883	1888,751	37,489964	1942,5958	593,5931
70	0,011806	36,633953	1210,766	1870,9219	36,449318	1932,279	580,27936
71	0,011875	35,591534	1197,6846	1853,4012	35,419537	1922,1213	567,3926
72	0,011944	34,61943	1184,9685	1836,3502	34,446087	1912,2047	555,1372
73	0,012014	33,665955	1172,596	1819,7429	33,503555	1902,5126	543,44073
74	0,012083	32,75237	1160,4504	1803,43	32,59435	1892,969	532,107
75	0,012153	31,844913	1148,657	1787,5756	31,697077	1883,6565	521,3224
76	0,012222	30,99828	1137,1794	1772,1339	30,850964	1874,5496	511,0041
77	0,012292	30,173058	1125,9149	1756,9714	30,034647	1865,5817	500,99524
78	0,012361	29,381466	1114,9916	1742,2571	29,248207	1856,836	491,4689
79	0,012431	28,599072	1104,3562	1727,9226	28,473534	1848,283	482,32962
80	0,0125	27,849455	1093,9214	1713,8531	27,728157	1839,8612	473,45724
81	0,012569	27,127281	1083,8146	1700,2184	27,01108	1831,6465	465,0137
82	0,012639	26,431929	1073,9672	1686,9286	26,321012	1823,6006	456,89203
83	0,012708	25,763779	1064,3082	1673,8895	25,657082	1815,6772	449,00122
84	0,012778	25,119835	1054,9658	1661,2722	25,01803	1807,9598	441,4875
85	0,012847	24,50113	1045,8606	1648,9714	24,403091	1800,3964	434,24432
86	0,012917	23,904488	1036,9342	1636,9088	23,810995	1792,9481	427,20206
87	0,012986	23,328764	1028,3156	1625,2557	23,241144	1785,6968	420,49374
88	0,013056	22,777075	1019,91504	1613,8939	22,692158	1778,5859	414,01562

89	0,013125	22,245117	1011,6822	1602,756	22,163681	1771,5833	407,71295
90	0,013194	21,732061	1003,74133	1592,0087	21,654264	1764,7693	401,7082
91	0,013264	21,244844	995,99695	1581,5245	21,16885	1758,0835	395,89825
92	0,013333	20,766968	988,40784	1571,2488	20,69556	1751,499	390,24146
93	0,013403	20,308386	981,0973	1561,3469	20,239529	1745,0964	384,85303
94	0,013472	19,865688	973,9617	1551,6804	19,799503	1738,809	379,62845
95	0,013542	19,438879	966,9703	1542,2079	19,375387	1732,6166	374,53842
96	0,013611	19,026937	960,2451	1533,094	18,965866	1726,6005	369,6913
97	0,013681	18,63276	953,675	1524,1892	18,573507	1720,6876	364,98196
98	0,01375	18,24841	947,2392	1515,4656	18,192024	1714,8644	360,3917
99	0,013819	17,878311	941,05707	1507,0848	17,824066	1709,2113	356,0217
100	0,013889	17,520712	935,0125	1498,89	17,468431	1703,6504	351,76816
101	0,013958	17,177074	929,0932	1490,8645	17,126532	1698,1737	347,62054
102	0,014028	16,843159	923,4146	1483,1648	16,794743	1692,8607	343,67233
103	0,014097	16,52103	917,8589	1475,6316	16,474476	1687,6318	339,8235
104	0,014167	16,209694	912,4197	1468,2562	16,164734	1682,4827	336,06888
105	0,014236	15,9088335	907,20874	1461,1903	15,865606	1677,4911	332,49557
106	0,014306	15,617946	902,107	1454,2725	15,576207	1672,5752	329,00708
107	0,014375	15,336744	897,11755	1447,507	15,296568	1667,7373	325,60574
108	0,014444	15,064858	892,33734	1441,0254	15,026053	1663,0457	322,3641
109	0,014514	14,801752	887,65735	1434,6797	14,764368	1658,4246	319,1974
110	0,014583	14,547295	883,0874	1428,4834	14,511067	1653,8809	316,11295
111	0,014653	14,300771	878,70605	1422,5433	14,265965	1649,4711	313,16724
112	0,014722	14,062494	874,4178	1416,7299	14,028651	1645,1277	310,28888
113	0,014792	13,831408	870,23773	1411,0632	13,798896	1640,8615	307,4886
114	0,014861	13,608005	866,2271	1405,627	13,576385	1636,7174	304,80896
115	0,014931	13,391315	862,30334	1400,3087	13,360868	1632,6362	302,19028
116	0,015	13,181656	858,4851	1395,134	13,15209	1628,6317	299,64545
117	0,015069	12,978367	854,81946	1390,1669	12,949808	1624,7388	297,20612
118	0,015139	12,781487	851,235	1385,31	12,753796	1620,9056	294,8221
119	0,015208	12,590641	847,7528	1380,5925	12,5638275	1617,1478	292,50763
120	0,015278	12,4056835	844,40845	1376,0624	12,379696	1613,4927	290,28604
121	0,015347	12,226392	841,1396	1371,6349	12,201195	1609,894	288,1147

122	0,015417	12,052561	837,96967	1367,3422	12,02813	1606,3698	286,00894
123	0,015486	11,884016	834,92413	1363,2186	11,860307	1602,9396	283,985
124	0,015556	11,7204895	831,94855	1359,1903	11,697541	1599,5613	282,0067
125	0,015625	11,561861	829,0694	1355,293	11,539638	1596,2533	280,0912
126	0,015694	11,407944	826,2981	1351,5426	11,386425	1593,015	278,2461
127	0,015764	11,258599	823,5913	1347,88	11,237734	1589,8236	276,44226
128	0,015833	11,113626	820,9793	1344,3463	11,093404	1586,7062	274,6982
129	0,015903	10,972905	818,058	1340,4053	10,953282	1583,6685	272,74365
130	0,015972	10,836264	815,2427	1336,6108	10,817226	1580,6638	270,86584
131	0,016042	10,703582	812,98676	1333,5735	10,685098	1577,6876	269,38193
132	0,016111	10,574714	810,73376	1330,5236	10,556765	1574,739	267,71976
133	0,016181	10,449545	808,4407	1327,4248	10,432105	1571,8097	266,02972
134	0,01625	10,327951	806,07074	1324,2411	10,311001	1568,9019	264,38263
135	0,016319	10,209821	803,95734	1321,3625	10,193339	1566,0254	262,93616
136	0,016389	10,095043	801,76904	1318,4336	10,079012	1563,1688	261,4606
137	0,016458	9,983516	799,6271	1315,562	9,967915	1560,3333	259,95654
138	0,016528	9,875136	797,6246	1312,834	9,85995	1557,5162	258,45645
139	0,016597	9,769808	795,55804	1310,0792	9,755018	1554,7043	257,0737
140	0,016667	9,667435	793,4864	1307,3121	9,653028	1551,8685	255,58388
141	0,016736	9,567938	791,54395	1304,6797	9,553882	1549,0122	254,11783
142	0,016806	9,471162	789,5211	1301,9845	9,457498	1546,1349	252,67403
143	0,016875	9,377098	787,49365	1299,2864	9,36379	1543,2367	251,18643
144	0,016944	9,2856455	785,5554	1296,6798	9,272673	1540,3179	249,68571
145	0,017014	9,196697	783,5995	1294,0706	9,184069	1537,3784	248,21138
146	0,017083	9,110221	781,59515	1291,4197	9,097902	1534,4126	246,71228
147	0,017153	9,026103	779,65894	1288,8296	9,014101	1531,392	245,17862
148	0,017222	8,944308	777,6849	1286,2002	8,932596	1528,2816	243,64517
149	0,017292	8,864742	775,58875	1283,4427	8,853322	1525,0806	242,04807
150	0,017361	8,787363	773,5235	1280,6993	8,776215	1521,7926	240,37473
151	0,017431	8,712093	771,45044	1277,9465	8,701212	1518,4199	238,68536
152	0,0175	8,638886	769,2633	1275,079	8,628259	1514,9601	236,95813
153	0,017569	8,5676775	767,0773	1272,1931	8,557299	1511,3901	235,15588
154	0,017639	8,498419	764,8667	1269,2689	8,488277	1507,6869	233,31172

155	0,017708	8,431055	762,50586	1266,1859	8,421143	1503,8495	231,41023
156	0,017778	8,365536	760,10736	1263,0402	8,3558445	1499,8846	229,40863
157	0,017847	8,30181	757,7334	1259,9062	8,292333	1495,7938	227,35434
158	0,017917	8,23983	755,2084	1256,6174	8,230558	1491,5579	225,26755
159	0,017986	8,179548	752,6171	1253,2412	8,170473	1487,1896	223,0883
160	0,018056	8,120917	750,0423	1249,8644	8,112032	1482,691	220,84886
161	0,018125	8,063892	747,37164	1246,3896	8,055176	1478,0637	218,57896
162	0,018194	8,008335	744,6117	1242,8132	7,99979	1473,3125	216,24097
163	0,018264	7,947707	741,88104	1239,2495	7,9271793	1468,4314	213,83986
164	0,018333	7,873172	739,0941	1235,6316	7,8743877	1463,4371	211,41951
165	0,018403	7,8414817	736,2212	1231,924	7,820066	1458,331	208,9585
166	0,018472	7,771296	733,3629	1228,2172	7,7702584	1453,1119	206,44283
167	0,018542	7,735894	730,48846	1224,4974	7,7197843	1447,7799	203,90695
168	0,018611	7,6787934	727,53986	1220,7073	7,671152	1442,3495	201,35056
169	0,018681	7,6356797	724,59436	1216,9128	7,624385	1436,8223	198,75476
170	0,01875	7,586185	721,6625	1213,1342	7,5793896	1431,1815	196,13904
171	0,018819	7,545131	718,66315	1209,2944	7,535855	1425,4255	193,51114
172	0,018889	7,500753	715,6273	1205,4086	7,493987	1419,541	190,84358
173	0,018958	7,460284	712,58905	1201,5127	7,4533415	1413,5092	188,13533
174	0,019028	7,4210777	709,4896	1197,5594	7,4140253	1407,3483	185,40694
175	0,019097	7,3813663	706,3487	1193,5632	7,3753786	1401,0831	182,64977
176	0,019167	7,343781	703,249	1189,6139	7,3374896	1394,7367	179,8739
177	0,019236	7,3059134	700,1652	1185,7007	7,300168	1388,3331	177,11145
178	0,019306	7,2688594	697,082	1181,8062	7,2632627	1381,875	174,36026
179	0,019375	7,2324386	694,05524	1177,9835	7,2269063	1375,3546	171,61525
180	0,019444	7,1960235	691,16205	1174,2877	7,19083	1368,8055	161,99579
181	0,019514	7,160313	688,5648	1170,7717	7,1550975	1362,2596	156,22829
182	0,019583	7,124747	686,1059	1167,3896	7,1196256	1355,7009	154,02634
183	0,019653	7,0892534	683,7143	1164,1008	7,084317	1349,1283	151,84273
184	0,019722	7,0541697	681,3725	1160,8851	7,049221	1342,5411	149,67924
185	0,019792	7,0191436	679,0926	1157,7574	7,014268	1335,9324	147,53273
186	0,019861	6,9842424	676,87726	1154,7188	6,979361	1329,303	145,39832
187	0,019931	6,9491286	674,71826	1151,7612	6,9440827	1322,6576	143,28114

188	0,02	6,913514	672,6206	1148,8926	6,9086328	1315,994	141,18361
189	0,020069	6,8777194	670,59	1146,117	6,8728175	1309,3154	139,0992
190	0,020139	6,841703	668,6256	1143,4354	6,8367715	1302,6218	137,0319
191	0,020208	6,805411	666,7296	1140,8529	6,8005357	1295,9327	134,98701
192	0,020278	6,768959	664,9204	1138,3931	6,7640605	1289,2659	132,96388
193	0,020347	6,7323556	663,2073	1136,0681	6,7274137	1282,6207	130,9676
194	0,020417	6,6955085	661,58276	1133,8702	6,6905737	1275,9978	129,00209
195	0,020486	6,658508	660,05286	1131,8081	6,6535587	1269,3988	127,067245
196	0,020556	6,62136	658,6167	1129,8778	6,616238	1262,8208	125,15738
197	0,020625	6,5837502	657,27295	1128,0793	6,578471	1256,2726	123,27512
198	0,020694	6,5456786	656,02246	1126,4153	6,540393	1249,7645	121,42326
199	0,020764	6,507332	654,88965	1124,9183	6,501966	1243,3025	119,60557
200	0,020833	6,4687076	653,8632	1123,5724	6,4632144	1236,8809	117,81848
201	0,020903	6,429766	652,93536	1122,3685	6,424185	1230,5029	116,06328
202	0,020972	6,390561	652,1087	1121,3098	6,3849225	1224,1721	114,33882
203	0,021042	6,3512316	651,39233	1120,4077	6,3455143	1217,8914	112,6448
204	0,021111	6,3116937	650,80096	1119,6849	6,3057637	1211,683	110,98797
205	0,021181	6,271835	650,32404	1119,127	6,26578	1205,5476	109,36713
206	0,02125	6,231698	649,97003	1118,7443	6,2255497	1199,4899	107,782196
207	0,021319	6,191371	649,7428	1118,5427	6,185071	1193,5142	106,234436
208	0,021389	6,1508255	649,6378	1118,5175	6,144369	1187,6251	104,725296
209	0,021458	6,1100435	649,657	1118,6703	6,1034594	1181,8271	103,2542
210	0,021528	6,0690713	649,807	1119,0103	6,0623484	1176,1245	101,821075
211	0,021597	6,0279202	650,08594	1119,5354	6,0210166	1170,5227	100,42748
212	0,021667	5,9865847	650,49664	1120,2509	5,9795613	1165,0323	99,07583
213	0,021736	5,9451056	651,04016	1121,1567	5,937966	1159,6552	97,764046
214	0,021806	5,9035134	651,71747	1122,2543	5,896229	1154,3954	96,4925
215	0,021875	5,8617973	652,5244	1123,539	5,8543606	1149,2589	95,26252
216	0,021944	5,8199563	653,4613	1125,0109	5,8123736	1144,2522	94,074066
217	0,022014	5,778003	654,5326	1126,6758	5,7702765	1139,3806	92,92736
218	0,022083	5,735956	655,7371	1128,532	5,7280803	1134,6503	91,82352
219	0,022153	5,6938167	657,0707	1130,5741	5,685798	1130,0664	90,76315
220	0,022222	5,651596	658,53394	1132,8025	5,6434293	1125,6334	89,74592

221	0,022292	5,6093135	660,1272	1135,2175	5,6010213	1121,3564	88,772095
222	0,022361	5,5670004	661,84576	1137,813	5,558584	1117,2411	87,842606
223	0,022431	5,5246735	663,6873	1140,5853	5,5161204	1113,2963	86,95756
224	0,0225	5,4823236	665,65814	1143,5425	5,4736342	1109,5364	86,117805
225	0,022569	5,439946	667,765	1146,6941	5,4311275	1105,9779	85,32637
226	0,022639	5,397551	670,0196	1150,0574	5,3886065	1102,649	84,59086
227	0,022708	5,3551507	672,40717	1153,6105	5,3460774	1099,5332	83,90759
228	0,022778	5,3127437	674,9192	1157,3411	5,303545	1096,6294	83,2757
229	0,022847	5,270326	677,5443	1161,233	5,2610135	1093,9363	82,694336
230	0,022917	5,227889	680,27295	1165,2723	5,2184863	1091,4513	82,162285
231	0,022986	5,185423	683,09265	1169,4417	5,17586	1089,1698	81,67853
232	0,023056	5,142904	685,98047	1173,711	5,1331186	1087,0876	81,24259
233	0,023125	5,100229	688,9024	1178,0364	5,0902953	1085,2017	80,854225
234	0,023194	5,057533	691,8334	1182,3857	5,047388	1083,5354	80,516685
235	0,023264	5,014815	694,76227	1186,7435	5,004404	1082,0767	80,2274
236	0,023333	4,971957	697,6572	1191,0676	4,9613523	1080,7963	79,9817
237	0,023403	4,929077	700,5014	1195,3357	4,9182305	1079,6869	79,77603
238	0,023472	4,886114	703,2893	1199,5402	4,8750405	1078,7444	79,60776
239	0,023542	4,8430676	706,02356	1203,6855	4,831794	1077,9669	79,47596
240	0,023611	4,8000135	708,67145	1207,7361	4,788621	1077,3932	79,39225
241	0,023681	4,756983	711,2393	1211,6978	4,7455196	1076,9672	79,34392
242	0,02375	4,714073	713,7251	1215,5691	4,7025385	1076,6692	79,326515
243	0,023819	4,6712923	716,12476	1219,3475	4,6596766	1076,4904	79,337265
244	0,023889	4,6286416	718,4352	1223,0321	4,616935	1076,4247	79,37362
245	0,023958	4,58612	720,6423	1226,619	4,5743203	1076,503	79,442955
246	0,024028	4,543725	722,76715	1230,1313	4,5318384	1076,6687	79,53588
247	0,024097	4,5014734	724,8047	1233,564	4,4894958	1076,9059	79,64795
248	0,024167	4,4593654	726,75366	1236,917	4,4473004	1077,2031	79,77567
249	0,024236	4,4174075	728,60986	1240,1915	4,4052596	1077,559	79,917366
250	0,024306	4,3756194	730,37164	1243,392	4,363437	1077,9655	80,073395
251	0,024375	4,334042	732,0565	1246,5298	4,321878	1078,3953	80,23822
252	0,024444	4,295126	733,6633	1249,601	4,280589	1078,8365	80,40894
253	0,024514	4,2521453	735,1911	1252,6019	4,2395935	1079,2782	80,58245

254	0,024583	4,210355	736,6205	1255,5137	4,1988635	1079,7095	80,75516
255	0,024653	4,169724	737,9773	1258,3568	4,1583962	1080,124	80,926636
256	0,024722	4,1304154	739,268	1261,1317	4,118193	1080,513	81,0951
257	0,024792	4,090914	740,49396	1263,8346	4,0782537	1080,8682	81,258545
258	0,024861	4,0502706	741,6524	1266,4558	4,0385756	1081,1791	81,41393
259	0,024931	4,0111623	742,73895	1268,9806	3,999158	1081,4324	81,556915
260	0,025	3,9724517	743,7776	1271,4332	3,9599981	1081,639	81,69078
261	0,025069	3,932903	744,76526	1273,8076	3,9210846	1081,7958	81,81513
262	0,025139	3,8945758	745,7011	1276,0992	3,8823864	1081,8992	81,929016
263	0,025208	3,8564053	746,58673	1278,3026	3,8439195	1081,9434	82,02962
264	0,025278	3,8175602	747,42175	1280,4082	3,8056989	1081,922	82,11567
265	0,025347	3,779765	748,21893	1282,4374	3,7677104	1081,851	82,19061
266	0,025417	3,7423074	748,98114	1284,3912	3,7299528	1081,7311	82,25487
267	0,025486	3,7045743	749,7087	1286,27	3,6924205	1081,5636	82,30874
268	0,025556	3,667261	750,39874	1288,0728	3,6551087	1081,3505	82,35247
269	0,025625	3,6301959	751,0496	1289,7888	3,6180115	1081,0869	82,38353
270	0,025694	3,5933056	751,674	1291,4417	3,581124	1080,7878	82,40649
271	0,025764	3,5565732	752,2718	1293,034	3,5444407	1080,4573	82,42218
272	0,025833	3,520082	752,8456	1294,5696	3,5079577	1080,0981	82,43104
273	0,025903	3,4838462	753,3992	1296,0527	3,47167	1079,7139	82,43356
274	0,025972	3,4478092	753,9335	1297,4852	3,4356303	1079,3077	82,430565
275	0,026042	3,4119518	754,4505	1298,8678	3,399871	1078,8839	82,42258
276	0,026111	3,376313	754,9578	1300,2139	3,364367	1078,4489	82,41181
277	0,026181	3,3409514	755,45496	1301,525	3,3291187	1078,0054	82,39893
278	0,02625	3,3058906	755,9432	1302,8037	3,2941225	1077,5558	82,38435
279	0,026319	3,2711139	756,42523	1304,0527	3,259374	1077,1029	82,36845
280	0,026389	3,2365835	756,9025	1305,2734	3,2248702	1076,6495	82,352264
281	0,026458	3,2022655	757,3734	1306,4644	3,1906083	1076,1981	82,3366
282	0,026528	3,1681542	757,8389	1307,631	3,156587	1075,7496	82,32182
283	0,026597	3,1342714	758,2974	1308,7734	3,1228037	1075,3049	82,308235
284	0,026667	3,1006463	758,74786	1309,8917	3,0892568	1074,8644	82,29597
285	0,026736	3,0672867	759,1898	1310,9862	3,0559433	1074,4286	82,28515
286	0,026806	3,0341747	759,6213	1312,0546	3,0228634	1073,9974	82,27633

287	0,026875	3,0012877	760,03845	1313,0938	2,9900572	1073,5703	82,26942
288	0,026944	2,9686255	760,44257	1314,1073	2,9575202	1073,1454	82,263916
289	0,027014	2,9362156	760,8319	1315,0941	2,9252434	1072,7216	82,25977
290	0,027083	2,9040818	761,2051	1316,0536	2,8932252	1072,2974	82,256805
291	0,027153	2,8722293	761,5607	1316,9847	2,8614614	1071,8713	82,25469
292	0,027222	2,8406432	761,8952	1317,883	2,8299468	1071,4407	82,253395
293	0,027292	2,8092988	762,2046	1318,7455	2,7986765	1071,0022	82,25223
294	0,027361	2,7781758	762,4911	1319,5759	2,767648	1070,5544	82,250595
295	0,027431	2,7472765	762,75323	1320,3737	2,7368681	1070,0953	82,248314
296	0,0275	2,7166188	762,9893	1321,138	2,7063315	1069,6228	82,24501
297	0,027569	2,6862197	763,198	1321,868	2,676034	1069,1346	82,24017
298	0,027639	2,6560774	763,3734	1322,5582	2,6459727	1068,6257	82,23315
299	0,027708	2,6261709	763,5148	1323,2103	2,616145	1068,0939	82,223404
300	0,027778	2,596485	763,6247	1323,8289	2,586574	1067,5398	82,210785
301	0,027847	2,5670314	763,7021	1324,4144	2,5572655	1066,962	82,195114
302	0,027917	2,5378354	763,74615	1324,9683	2,5282168	1066,3594	82,17606
303	0,027986	2,5089173	763,7564	1325,4922	2,499424	1065,7317	82,15296
304	0,028056	2,480271	763,7314	1325,9912	2,4708886	1065,0785	82,12338
305	0,028125	2,4518807	763,6773	1326,4741	2,4426088	1064,4054	82,09215
306	0,028194	2,4237378	763,5941	1326,9434	2,4145882	1063,7125	82,05877
307	0,028264	2,3958316	763,4817	1327,4017	2,3868332	1063	82,02312
308	0,028333	2,3682168	763,34015	1327,852	2,3593524	1062,2683	81,985176
309	0,028403	2,3408806	763,1676	1328,2976	2,332146	1061,5175	81,94465
310	0,028472	2,3138268	762,9688	1328,7563	2,3052254	1060,7565	81,896935
311	0,028542	2,28706	762,7564	1329,239	2,278597	1059,9946	81,849915
312	0,028611	2,2605824	762,52875	1329,7473	2,252269	1059,2323	81,80553
313	0,028681	2,234401	762,28424	1330,2826	2,226248	1058,4692	81,763954
314	0,02875	2,2085295	762,0223	1330,8464	2,2005422	1057,7053	81,72372
315	0,028819	2,1829822	761,7461	1331,4601	2,175157	1056,9525	81,67755
316	0,028889	2,1577666	761,4746	1332,1437	2,1500995	1056,2255	81,63539
317	0,028958	2,1328812	761,19775	1332,8917	2,125375	1055,522	81,60348
318	0,029028	2,1083255	760,9087	1333,7014	2,1009896	1054,8395	81,58115
319	0,029097	2,084106	760,6035	1334,5697	2,0769486	1054,1744	81,56528

320	0,029167	2,0602355	760,2853	1335,5107	2,0532568	1053,5238	81,56151
321	0,029236	2,0367236	759,9379	1336,5085	2,0299191	1052,8793	81,56445
322	0,029306	2,013573	759,57587	1337,5675	2,0069416	1052,2433	81,56852
323	0,029375	1,9907818	759,20416	1338,693	1,9843285	1051,6171	81,575874
324	0,029444	1,9683524	758,8245	1339,8881	1,9620866	1051,0013	81,59084
325	0,029514	1,9462949	758,4313	1341,1713	1,9402213	1050,398	81,607796
326	0,029583	1,9246215	758,04144	1342,538	1,9187402	1049,8053	81,634
327	0,029653	1,9033407	757,64154	1343,9648	1,8976496	1049,2072	81,67835
328	0,029722	1,8824552	757,2186	1345,4362	1,8769579	1048,5896	81,73943
329	0,029792	1,8619695	756,7546	1346,9371	1,8566741	1047,9357	81,80617
330	0,029861	1,841894	756,257	1348,4908	1,8368064	1047,2451	81,85105
331	0,029931	1,8222432	755,7662	1350,1276	1,8173654	1046,5587	81,87447
332	0,03	1,8030306	755,29626	1351,8628	1,7983612	1045,8872	81,89262
333	0,030069	1,7842642	754,8565	1353,7052	1,7798042	1045,2365	81,921524
334	0,030139	1,7659509	754,439	1355,6647	1,7617052	1044,5961	81,976425
335	0,030208	1,7481027	754,02246	1357,6943	1,7440742	1043,9438	82,046074
336	0,030278	1,7307329	753,6052	1359,7828	1,7269229	1043,2758	82,1218
337	0,030347	1,7138562	753,18506	1361,9249	1,7102618	1042,5874	82,20135
338	0,030417	1,6974831	752,75397	1364,1226	1,6941017	1041,8646	82,29238
339	0,030486	1,6816212	752,3215	1366,384	1,678454	1041,1136	82,37283
340	0,030556	1,6662812	751,89197	1368,7013	1,6633296	1040,3418	82,45112
341	0,030625	1,6514784	751,4669	1371,0743	1,6487393	1039,551	82,52733
342	0,030694	1,6372261	751,04755	1373,5166	1,6346934	1038,7394	82,592415
343	0,030764	1,6235331	750,6399	1376,03	1,6212028	1037,893	82,71477
344	0,030833	1,610408	750,21136	1378,5621	1,6082772	1036,9994	82,83154
345	0,030903	1,597862	749,75134	1381,0994	1,5959284	1036,0477	82,94286
346	0,030972	1,5859104	749,24915	1383,6443	1,5841694	1034,9923	83,14765
347	0,031042	1,5745708	748,6154	1386,0808	1,5730135	1033,7578	83,39194
348	0,031111	1,5638639	747,88727	1388,4596	1,562475	1032,3983	83,5803
349	0,031181	1,5538676	747,0778	1390,805	1,5525665	1030,9319	83,665474
350	0,03125	1,5445523	746,26807	1393,2799	1,5433011	1029,4171	83,66585
351	0,031319	1,5358046	745,4495	1395,849	1,5346901	1027,873	83,692924
352	0,031389	1,5277438	744,61383	1398,4998	1,5267446	1026,2949	83,735725

353	0,031458	1,5203375	743,743	1401,2378	1,5194751	1024,6652	83,78221
354	0,031528	1,5136167	742,81134	1404,0724	1,5128896	1022,9598	83,839836
355	0,031597	1,5076462	741,81354	1406,951	1,5069953	1021,1677	83,949135
356	0,031667	1,5023944	740,7368	1409,8594	1,501798	1019,2731	84,12213
357	0,031736	1,4978081	739,4046	1412,6718	1,4973012	1017,0798	84,39237
358	0,031806	1,4939325	737,90125	1415,4536	1,4935075	1014,6945	84,58281
359	0,031875	1,4908108	736,2428	1418,218	1,4904175	1012,1337	84,718765
360	0,031944	1,4884056	734,3634	1420,9883	1,4880308	1009,3174	84,82999
361	0,032014	1,4866892	732,3146	1423,8789	1,4863434	1006,1707	113,31939
362	0,032083	1,4856755	730,1316	1426,8654	1,4853482	1002,6457	143,01736
363	0,032153	1,4853677	727,77985	1429,9729	1,4850342	998,5388	154,92659
364	0,032222	1,485743	725,12946	1433,2076	1,4853858	994,10486	164,5569
365	0,032292	1,486774	722,3268	1436,5947	1,4863834	988,60315	169,30957
366	0,032361	1,4884341	719,3834	1440,1545	1,488002	981,791	168,361
367	0,032431	1,4906625	716,2967	1444,1663	1,490212	971,38965	167,42899
368	0,0325	1,4934456	713,206	1448,5846	1,4929787	958,9436	166,66908
369	0,032569	1,49673	710,1076	1453,4009	1,4962634	944,6035	166,06876
370	0,032639	1,5005053	706,97955	1458,8137	1,5000228	927,931	165,66566
371	0,032708	1,5046837	703,8745	1464,8099	1,5042102	910,0249	165,42062
372	0,032778	1,509271	700,8004	1471,2946	1,5087756	891,2719	165,29985
373	0,032847	1,5141522	697,78424	1478,4404	1,5136651	871,62836	165,33624
374	0,032917	1,5193251	694,871	1486,3978	1,5188227	851,30566	165,5687
375	0,032986	1,5246916	692,0435	1494,9211	1,5241898	830,7026	165,93158
376	0,033056	1,5302234	689,3158	1504,0615	1,5297072	809,88	166,43388
377	0,033125	1,5358391	686,78394	1514,2097	1,5353144	788,9368	167,21094
378	0,033194	1,5414885	684,44165	1525,0609	1,5409533	767,9513	168,2198
379	0,033264	1,5471166	682,29877	1536,6232	1,5465664	746,95764	169,46501
380	0,033333	1,5526634	680,52466	1549,3552	1,5521005	726,286	171,08867
381	0,033403	1,5580865	679,0121	1562,8281	1,5575062	706,0449	172,96297
382	0,033472	1,5633305	677,7173	1576,908	1,562738	686,25745	175,0368
383	0,033542	1,5683657	676,70233	1591,7379	1,5677555	667,3224	177,3406
384	0,033611	1,5731472	675,86017	1607,0194	1,5725232	649,38184	179,76428
385	0,033681	1,5776498	675,1102	1622,5316	1,5770111	632,226	182,23146

386	0,03375	1,5818444	674,4387	1638,2269	1,5811937	616,0749	184,70866
387	0,033819	1,5857139	673,7975	1653,9365	1,5850519	601,19257	187,127
388	0,033889	1,5892428	673,1695	1669,6182	1,5885711	587,0748	189,49617
389	0,033958	1,5924209	672,553	1685,2606	1,5917426	573,71277	191,81259
390	0,034028	1,5952455	671,956	1700,7888	1,5945623	561,5611	194,02472
391	0,034097	1,5977147	671,3839	1716,2645	1,5970299	550,00745	196,19856
392	0,034167	1,5998365	670,84186	1731,6952	1,5991508	539,03723	198,33746
393	0,034236	1,6016165	670,37933	1747,0991	1,6009327	528,91376	200,44054
394	0,034306	1,6030688	669,98334	1762,4713	1,6023873	519,37384	202,51419
395	0,034375	1,6042062	669,6412	1777,8063	1,6035277	510,30447	204,55887
396	0,034444	1,605045	669,37115	1793,0681	1,6043696	501,86108	206,55376
397	0,034514	1,6055909	669,16284	1808,2107	1,6049302	493,99252	208,49466
398	0,034583	1,6058861	669,0019	1823,2722	1,6052278	486,50723	210,40282
399	0,034653	1,6059351	668,9001	1838,2397	1,605282	479,4596	212,27626
400	0,034722	1,6057681	668,87604	1853,0658	1,605113	472,94147	214,09799
401	0,034792	1,60538	668,8856	1867,7601	1,604742	466,73453	215,85945
402	0,034861	1,6048329	668,92505	1882,3115	1,6041901	460,83405	217,55365
403	0,034931	1,6041123	668,9636	1896,4558	1,6034786	455,44293	219,08885
404	0,035	1,6032554	669,01807	1910,4213	1,6026282	450,30692	220,57048
405	0,035069	1,6022902	669,09216	1924,2218	1,6016595	445,4174	222,00267
406	0,035139	1,6012098	669,2213	1937,8314	1,600592	440,88278	223,37761
407	0,035208	1,6000648	669,39087	1951,2949	1,5994451	436,59293	224,71132
408	0,035278	1,5988523	669,5943	1964,6414	1,598237	432,49725	226,01727
409	0,035347	1,5975926	669,846	1977,8312	1,5969847	428,65778	227,297
410	0,035417	1,5963159	670,1631	1990,9192	1,5957052	425,05054	228,57967
411	0,035486	1,5950147	670,52136	2003,9213	1,5944128	421,5976	229,85593
412	0,035556	1,5937229	670,9252	2016,8085	1,5931216	418,3228	231,11772
413	0,035625	1,5924441	671,3632	2029,4686	1,5918443	415,2639	232,3452
414	0,035694	1,5911853	671,81903	2041,98	1,5905921	412,33072	233,55344
415	0,035764	1,5899711	672,2922	2054,3376	1,5893756	409,5234	234,74261
416	0,035833	1,5887934	672,7927	2066,4253	1,5882032	406,91568	235,8986
417	0,035903	1,5876721	673,3005	2078,34	1,5870827	404,40884	237,02373
418	0,035972	1,58661	673,81305	2090,076	1,5860201	402,0008	238,11589

419	0,036042	1,5856059	674,31683	2101,471	1,5850201	399,7393	239,13945
420	0,036111	1,584675	674,8138	2112,6282	1,5840862	397,5756	240,1207
421	0,036181	1,583807	675,30634	2123,589	1,5832202	395,49268	241,06747
422	0,03625	1,5830104	675,79565	2134,2822	1,582423	393,52	241,96837
423	0,036319	1,5822831	676,2842	2144,739	1,5816934	391,64398	242,8321
424	0,036389	1,5816182	676,77374	2155,032	1,5810297	389,8366	243,67252
425	0,036458	1,5810213	677,2666	2165,1265	1,5804284	388,11395	244,48735
426	0,036528	1,5804782	677,76746	2175,002	1,5798852	386,4876	245,27885
427	0,036597	1,5799903	678,27246	2184,7368	1,5793943	384,91916	246,05475
428	0,036667	1,5795487	678,78156	2194,318	1,5789493	383,4122	246,8134
429	0,036736	1,5791429	679,291	2203,6443	1,5785426	381,99457	247,54243
430	0,036806	1,578771	679,79987	2212,825	1,5781655	380,62546	248,25618
431	0,036875	1,5784161	680,30804	2221,8604	1,5778092	379,30417	248,95491
432	0,036944	1,5780748	680,81464	2230,651	1,5774637	378,05972	249,62932
433	0,037014	1,5777334	681,3181	2239,2861	1,5771188	376,8587	250,28691
434	0,037083	1,5773804	681,8181	2247,777	1,5767634	375,69675	250,92847
435	0,037153	1,5770091	682,3094	2256,0374	1,5763867	374,59152	251,54272
436	0,037222	1,5766015	682,79254	2264,112	1,5759774	373,52945	252,13597
437	0,037292	1,5761534	683,2698	2272,044	1,5755244	372,50073	252,71382
438	0,037361	1,575649	683,73975	2279,7854	1,5750169	371,51672	253,27252
439	0,037431	1,5750793	684,2025	2287,3362	1,5744438	370,5763	253,81125
440	0,0375	1,5744396	684,6596	2294,7546	1,5738051	369,66498	254,33614
441	0,037569	1,573743	685,1092	2302,0125	1,5731052	368,78827	254,84425
442	0,037639	1,5729854	685,55133	2309,072	1,5723441	367,95605	255,33588
443	0,037708	1,5721577	685,98975	2316,0156	1,5715121	367,15	255,8186
444	0,037778	1,5712514	686,42456	2322,8396	1,5706028	366,3709	256,29236
445	0,037847	1,5702622	686,85254	2329,4634	1,56961	365,63492	256,75153
446	0,037917	1,5691856	687,27686	2335,979	1,5685294	364,92203	257,2039
447	0,037986	1,568015	687,69745	2342,3872	1,5673548	364,2321	257,6497
448	0,038056	1,5667515	688,1132	2348,6208	1,5660957	363,5802	258,087
449	0,038125	1,5654328	688,5263	2354,7468	1,5647751	362,95197	258,52042
450	0,038194	1,56407	688,9372	2360,7778	1,563412	362,3446	258,95062
451	0,038264	1,5626743	689,3452	2366,667	1,562013	361,7685	259,37717

452	0,038333	1,5612456	689,751	2372,4429	1,56058	361,21704	259,80148
453	0,038403	1,5597798	690,15497	2378,1313	1,5591139	360,68433	260,2243
454	0,038472	1,5582876	690,5566	2383,7021	1,557616	360,1768	260,64536
455	0,038542	1,5567695	690,9559	2389,1533	1,5561122	359,69452	261,06546
456	0,038611	1,5553105	691,3539	2394,5251	1,5546514	359,22928	261,48557
457	0,038681	1,5539258	691,7507	2399,8025	1,5532687	358,78464	261,90616
458	0,03875	1,552634	692,1466	2404,9624	1,5519736	358,366	262,32864
459	0,038819	1,5514302	692,5423	2410,0522	1,5507627	357,96283	262,75262
460	0,038889	1,5502986	692,93774	2415,0679	1,5496337	357,57608	263,1782
461	0,038958	1,5492598	693,33307	2419,9658	1,5485842	357,21536	263,6071
462	0,039028	1,5482813	693,729	2424,8022	1,5476028	356,86917	264,0389
463	0,039097	1,5473609	694,12573	2429,578	1,5466781	356,5374	264,4739
464	0,039167	1,5465037	694,52545	2434,2566	1,5458207	356,23065	264,91626
465	0,039236	1,5457346	694,92737	2438,8796	1,5450513	355,93842	265,36334
466	0,039306	1,5450763	695,3313	2443,4514	1,5443873	355,6595	265,81476
467	0,039375	1,5445272	695,7384	2447,9434	1,5438334	355,40112	266,2728
468	0,039444	1,5440962	696,1483	2452,377	1,5434073	355,15805	266,7363
469	0,039514	1,5438359	696,5607	2456,7656	1,5431342	354,92725	267,20447
470	0,039583	1,5437186	696,9773	2461,0928	1,5430076	354,71405	267,68
471	0,039653	1,5436962	697,3985	2465,366	1,5429577	354,51688	268,1627
472	0,039722	1,5436494	697,823	2469,6016	1,5429081	354,33084	268,65033
473	0,039792	1,5435613	698,25183	2473,7888	1,542802	354,1591	269,14423
474	0,039861	1,5433788	698,6859	2477,9226	1,5426335	354,00336	269,64532
475	0,039931	1,5432178	699,1237	2482,024	1,5424623	353,85785	270,15125
476	0,04	1,5431237	699,566	2486,0889	1,5423923	353,72412	270,6629
477	0,040069	1,543251	700,01556	2490,1077	1,542489	353,6069	271,1831
478	0,040139	1,5435134	700,46954	2494,1003	1,5427587	353,49893	271,70807
479	0,040208	1,5439469	700,92804	2498,0671	1,543157	353,40042	272,23785
480	0,040278	1,544414	701,39465	2501,99	1,5436252	353,31784	272,77554
481	0,040347	1,5449159	701,86584	2505,891	1,5440989	353,24368	273,31744
482	0,040417	1,5453506	702,3416	2509,771	1,5445384	353,17786	273,8635
483	0,040486	1,5457488	702,826	2513,6182	1,5449001	353,12616	274,41702
484	0,040556	1,5459666	703,31616	2517,4473	1,5451328	353,08313	274,97513

485	0,040625	1,5461013	703,81146	2521,2605	1,5452417	353,04767	275,5371
486	0,040694	1,5460968	704,3147	2525,049	1,5452539	353,0237	276,10443
487	0,040764	1,5460696	704,82416	2528,819	1,5451976	353,00842	276,67557
488	0,040833	1,5459424	705,3386	2532,5757	1,5450821	352,99994	277,24976
489	0,040903	1,5458168	705,86066	2536,3154	1,5449487	353,00125	277,8284
490	0,040972	1,5457401	706,39056	2540,0422	1,5448525	353,01163	278,41156
491	0,041042	1,5455865	706,9259	2543,7607	1,5446813	353,02826	278,99756
492	0,041111	1,5453157	707,46857	2547,4685	1,5444009	353,0529	279,58707
493	0,041181	1,544936	708,019	2551,163	1,5440049	353,08606	280,17926
494	0,04125	1,5442798	708,5744	2554,85	1,543237	353,1247	280,7731
495	0,041319	1,5428437	709,13586	2558,528	1,5418373	353,16986	281,36887
496	0,041389	1,5408006	709,70624	2562,198	1,5397346	353,22382	281,96747
497	0,041458	1,5381408	710,2804	2565,858	1,5371906	353,28256	282,56662
498	0,041528	1,5354958	710,8581	2569,5051	1,5344762	353,34634	283,16605
499	0,041597	1,5327224	711,43317	2573,0989	1,5317578	353,4181	283,7648
500	0,041667	1,5300328	712,00323	2576,65	1,5289778	353,49414	284,36316
501	0,041736	1,5271069	712,56775	2580,1562	1,5260977	353,57443	284,9611
502	0,041806	1,5241382	713,1177	2583,5647	1,5230556	353,66214	285,55798
503	0,041875	1,520881	713,6585	2586,914	1,5198224	353,75406	286,1542
504	0,041944	1,5174527	714,1919	2590,2124	1,5163251	353,84995	286,74966
505	0,042014	1,5135773	714,71985	2593,4548	1,5123763	353,95206	287,34348
506	0,042083	1,5088283	715,2484	2596,6763	1,5075166	354,05838	287,93564
507	0,042153	1,5029551	715,7784	2599,8845	1,5016205	354,16812	288,52634
508	0,042222	1,4961436	716,3139	2603,0862	1,4947169	354,28305	289,11444
509	0,042292	1,4884313	716,8572	2606,2957	1,4869307	354,40228	289,7003
510	0,042361	1,4798714	717,40704	2609,515	1,47832	354,5247	290,28424
511	0,042431	1,470647	717,96796	2612,7542	1,4690821	354,65143	290,86514
512	0,0425	1,4611957	718,54114	2616,02	1,4597625	354,7821	291,44205
513	0,042569	1,4518545	719,123	2619,305	1,4500568	354,91534	292,0157
514	0,042639	1,4412202	719,7165	2622,6165	1,4388106	355,05182	292,58463
515	0,042708	1,4284492	720,32434	2625,9631	1,4257425	355,1919	293,14755
516	0,042778	1,4143595	720,94165	2629,3335	1,4115031	355,33435	293,7067
517	0,042847	1,3996797	721,57025	2632,733	1,3965638	355,47958	294,2613

518	0,042917	1,384537	722,21497	2636,1746	1,3811597	355,62848	294,80927
519	0,042986	1,3688631	722,8684	2639,639	1,3653344	355,7793	295,3522
520	0,043056	1,3524809	723,5312	2643,127	1,3490428	355,93204	295,88953
521	0,043125	1,3362868	724,2079	2646,6484	1,3324406	356,08777	296,41617
522	0,043194	1,3204272	724,89246	2650,19	1,316108	356,24536	296,93756
523	0,043264	1,3045987	725,58484	2653,7515	1,3001106	356,4048	297,4538
524	0,043333	1,2890353	726,2914	2657,349	1,2845199	356,56766	297,9607
525	0,043403	1,2741642	727,00464	2660,963	1,2694792	356,73224	298,46176
526	0,043472	1,2599096	727,7244	2664,592	1,2550977	356,8984	298,9572
527	0,043542	1,2462289	728,4546	2668,2449	1,2414477	357,0673	299,4424
528	0,043611	1,233307	729,1913	2671,9126	1,2285961	357,23822	299,92172
529	0,043681	1,2213268	729,9336	2675,5933	1,2169349	357,41077	299,71924
530	0,04375	1,2107588	730,68414	2679,2913	1,2068821	357,58545	295,18893
531	0,043819	1,2019492	731,43896	2682,9949	1,1984619	357,7601	289,03915
532	0,043889	1,1947703	732,1968	2686,7012	1,1916143	357,93463	282,03336
533	0,043958	1,1891345	732,9584	2690,4084	1,186365	358,10883	274,86023
534	0,044028	1,1850684	733,72186	2694,111	1,1825798	358,28235	267,34988
535	0,044097	1,1823637	734,4861	2697,8074	1,1800536	358,45517	259,61163
536	0,044167	1,1807568	735,2498	2701,489	1,1785854	358,62662	251,57936
537	0,044236	1,1800691	736,01215	2705,1519	1,1779867	358,7967	243,54762
538	0,044306	1,1800904	736,7733	2708,8015	1,1779782	358,9659	235,49312
539	0,044375	1,1804996	737,53296	2712,4333	1,1783229	359,1341	227,38673
540	0,044444	1,181118	738,28955	2716,0403	1,1788973	359,30096	219,03394
541	0,044514	1,1819093	739,0435	2719,6282	1,1796262	359,46692	210,55904
542	0,044583	1,1828148	739,79395	2723,192	1,1804534	359,63168	201,95453
543	0,044653	1,1837815	740,53864	2726,719	1,181356	359,7951	193,40227
544	0,044722	1,1848229	741,28	2730,2246	1,1823798	359,95798	184,85432
545	0,044792	1,1860522	742,01764	2733,7065	1,1836632	360,12027	176,30287
546	0,044861	1,1876086	742,74817	2737,1462	1,185248	360,28162	167,40054
547	0,044931	1,1894693	743,47345	2740,5571	1,1871096	360,44168	159,4953
548	0,045	1,1915734	744,1933	2743,9382	1,1892291	360,6003	152,7636
549	0,045069	1,1939111	744,89874	2747,2463	1,1915542	360,7525	148,34578
550	0,045139	1,196398	745,59717	2750,5183	1,1939903	360,9018	143,78566

551	0,045208	1,1989479	746,2887	2753,7546	1,1965276	361,04825	139,26942
552	0,045278	1,2015972	746,968	2756,9285	1,1991742	361,1891	139,10614
553	0,045347	1,2043599	747,64014	2760,0652	1,2019087	361,32654	139,08716
554	0,045417	1,2071817	748,306	2763,17	1,2046868	361,46133	139,17795
555	0,045486	1,2100104	748,96576	2766,239	1,2074524	361,59503	139,26729
556	0,045556	1,2127408	749,6256	2769,303	1,2099807	361,7314	139,35883
557	0,045625	1,2150966	750,28625	2772,3655	1,2121298	361,87067	139,45284
558	0,045694	1,2170374	750,9511	2775,4387	1,2139828	362,01736	139,55351
559	0,045764	1,2187694	751,6223	2778,5334	1,2156683	362,17245	139,66182
560	0,045833	1,2204171	752,29865	2781,6458	1,217255	362,33438	139,77641
561	0,045903	1,2219869	752,9829	2784,7864	1,2187525	362,5074	139,90157
562	0,045972	1,2234654	753,67413	2787,9512	1,2201725	362,69064	140,03621
563	0,046042	1,2248807	754,37134	2791,1375	1,2215656	362,88196	140,17834
564	0,046111	1,226308	755,0789	2794,3623	1,2230256	363,08606	140,3323
565	0,046181	1,2278806	755,79974	2797,6384	1,2246919	363,30475	140,4998
566	0,04625	1,2297046	756,53015	2800,952	1,2265496	363,53363	140,67691
567	0,046319	1,231692	757,2742	2804,3186	1,2285136	363,7768	140,86758
568	0,046389	1,2337209	758,0368	2807,7588	1,2305182	364,0383	141,07487
569	0,046458	1,2357556	758,8167	2811,2693	1,2325441	364,31436	141,29552
570	0,046528	1,2378111	759,62286	2814,888	1,234604	364,61142	141,53549
571	0,046597	1,239911	760,44666	2818,469	1,2367105	364,93787	141,80638
572	0,046667	1,2420598	761,2132	2820,9104	1,2388617	365,28302	142,09734
573	0,046736	1,2442364	761,87494	2821,393	1,2409887	365,65128	142,41322
574	0,046806	1,246337	762,41907	2819,5933	1,2429975	366,04877	142,75739
575	0,046875	1,2482663	762,888	2816,2698	1,2448511	366,46387	143,11862
576	0,046944	1,2500321	763,2694	2811,155	1,2465675	366,8991	143,49944
577	0,047014	1,2516825	763,56177	2804,0427	1,2481804	367,36734	143,91249
578	0,047083	1,2532518	763,8016	2795,713	1,2497181	367,8542	144,3439
579	0,047153	1,2547604	763,9855	2786,081	1,2512012	368,3607	144,79472
580	0,047222	1,2562258	764,09753	2774,6687	1,2526504	368,89853	145,27686
581	0,047292	1,2576685	764,1791	2762,4614	1,2540842	369,45346	145,77617
582	0,047361	1,2591064	764,2306	2749,4673	1,2555187	370,0254	146,29266
583	0,047431	1,2605511	764,2186	2734,8027	1,2569681	370,63086	146,84314

584	0,0475	1,2620193	764,184	2719,5146	1,2584375	371,2549	147,41264
585	0,047569	1,263506	764,12665	2703,605	1,2599233	371,89722	148,00084
586	0,047639	1,2650058	764,0175	2686,357	1,261423	372,57422	148,62485
587	0,047708	1,2665172	763,87256	2668,492	1,2629347	373,27277	149,2713
588	0,047778	1,2680382	763,69476	2650,0674	1,2644535	373,9909	149,93819
589	0,047847	1,269562	763,45703	2630,6768	1,2659711	374,74298	150,64095
590	0,047917	1,2710787	763,1911	2610,8628	1,2674787	375,51636	151,3666
591	0,047986	1,27258	762,90137	2590,6902	1,2689706	376,3081	152,11205
592	0,048056	1,2740623	762,5727	2569,9316	1,2704421	377,13174	152,89203
593	0,048125	1,2755213	762,2189	2548,8083	1,2718894	377,97937	153,69832
594	0,048194	1,2769542	761,845	2527,3992	1,273311	378,8468	154,52637
595	0,048264	1,27836	761,43976	2505,5588	1,2747049	379,74774	155,39142
596	0,048333	1,2797371	761,0102	2483,402	1,27607	380,67435	156,28545
597	0,048403	1,2810848	760,5656	2461,0708	1,2774038	381,61996	157,20119
598	0,048472	1,2823963	760,10626	2438,6401	1,2786968	382,59372	158,1494
599	0,048542	1,2836667	759,6277	2416,0647	1,2799602	383,59317	159,12767
600	0,048611	1,2849162	759,13416	2393,3774	1,2812153	384,61145	160,12811
601	0,048681	1,2861698	758,61633	2370,5103	1,2824757	385,65826	161,16228
602	0,04875	1,2874336	758,0962	2347,744	1,2837405	386,73355	162,23056
603	0,048819	1,2886981	757,5686	2324,989	1,2850006	387,8288	163,32289
604	0,048889	1,2899513	757,0221	2302,1694	1,286249	388,95297	164,45033
605	0,048958	1,2911909	756,46857	2279,4658	1,2874888	390,10858	165,61638
606	0,049028	1,2924258	755,90515	2256,7783	1,288732	391,28537	166,80862
607	0,049097	1,2936722	755,3228	2234,0503	1,289992	392,4915	168,03745
608	0,049167	1,2949427	754,7291	2211,459	1,2912774	393,73227	169,30995
609	0,049236	1,2962421	754,12494	2188,9092	1,2925906	394,99557	170,6111
610	0,049306	1,2975687	753,50476	2166,378	1,2939281	396,28867	171,95035
611	0,049375	1,2989161	752,8679	2143,9797	1,2952856	397,61996	173,33917
612	0,049444	1,3002815	752,2208	2121,6543	1,2966635	398,97522	174,75937
613	0,049514	1,3016684	751,56085	2099,4146	1,2980669	400,36057	176,21913
614	0,049583	1,3030846	750,8807	2077,3096	1,299503	401,78802	177,73518
615	0,049653	1,3045377	750,19037	2055,307	1,3009769	403,24097	179,2856
616	0,049722	1,30603	749,48895	2033,4347	1,3024893	404,72433	180,8773

617	0,049792	1,3075595	748,7668	2011,727	1,3040364	406,25412	182,53285
618	0,049861	1,3091208	748,03455	1990,1439	1,305615	407,81094	184,22617
619	0,049931	1,3107117	747,2914	1968,7104	1,3072255	409,39874	185,96277
620	0,05	1,3123358	746,5322	1947,2858	1,3088728	411,0277	187,77135