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Resultado da simulação:

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=== Computador 1 ===
- a      = 0.0305556
- aef    = 0.0305556
- kf     = 6
- ts     = 2
- mi     = 0.5
- r      = 0.0611
- pho    = 0.0611
- U      = 0.0611
- P0     = 0.9389
- Pkf    = 0.0000
- Lw     = 0.003978
- Tw     = 0.130177
- Ls     = 0.0651
- Tr     = 2.1302

=== Computador 2 ===
- a      = 0.0305556
- aef    = 0.0305556
- kf     = 6
- ts     = 4
- mi     = 0.25
- r      = 0.1222
- pho    = 0.1222
- U      = 0.1222
- P0     = 0.8778
- Pkf    = 0.0000
- Lw     = 0.017016
- Tw     = 0.556882
- Ls     = 0.1392
- Tr     = 4.5569

=== Computador 3 ===
- a      = 0.0305556
- aef    = 0.0305052
- kf     = 6
- ts     = 12.15
- mi     = 0.0823045
- r      = 0.3712
- pho    = 0.3712
- U      = 0.3706
- P0     = 0.6294
- Pkf    = 0.0016
- Lw     = 0.213008
- Tw     = 6.982690
- Ls     = 0.5836
- Tr     = 19.1327

=== Servidor ===
- a      = 0.0305556
- aef    = 0.0305553
- kf     = 6
- ts     = 4.6288
- mi     = 0.216039
- r      = 0.1414
- pho    = 0.1414
- U      = 0.1414
- P0     = 0.8586
- Pkf    = 0.0000
- Lw     = 0.023292
- Tw     = 0.762303
- Ls     = 0.1647
- Tr     = 5.3911
- theta  = 8.0000
- delta  = 0.1414
- ts_medio = 4.6288

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Figura 1: Resultados da simulação para $a = 110$ mensagens / hora e $K_f=6$

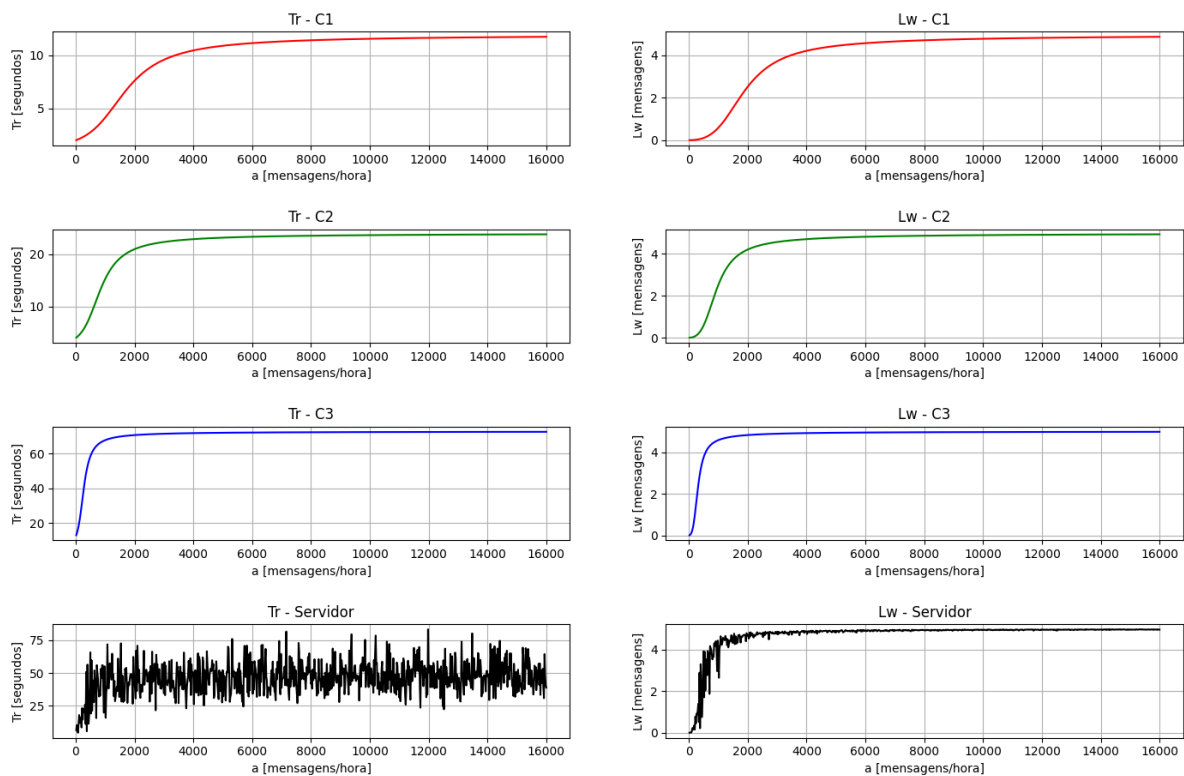


Figura 2: Gráficos de Tr e Lw em função de a, simulado para valores de a entre 20 e 1600

*** Resultados numericos da figura 2 constam ao final deste relatório.**

Conclusão:

Observando os valores das Figuras 1 e 2 é possível notar que:

- O computador 1 é o mais rápido, pois apresenta os menores valores de Tr independente da quantidade de mensagens por hora (a);
 - Há uma convergência dos valores de Tr e Lw , o que ocorre devido a capacidade máxima da fila $Kf=6$, fazendo com que mensagens adicionais sejam descartadas;
 - É possível perceber que o servidor possui uma curva mais ruídoosa do que os computadores, o que ocorre devido a natureza aleatória do Ts do servidor, porém ainda assim nota-se a mesma convergência que os computadores uma vez que o servidor também tem uma capacidade máxima $Kf=6$.
- Por fim, observando os valores de $P0$ na Figura 1, pode-se dizer que para $a = 110$ (mensagens/hora) os computadores passaram a maior parte do tempo ociosos (valores de $P0$ próximos a 1), porém, conforme a quantidade de mensagens por hora aumenta, o tempo ocioso diminuir, tendendo a zero. Ao mesmo tempo, observamos que aef (a efetivo) seja máximo (não é possível atender mais mensagens, pois a fila está cheia).

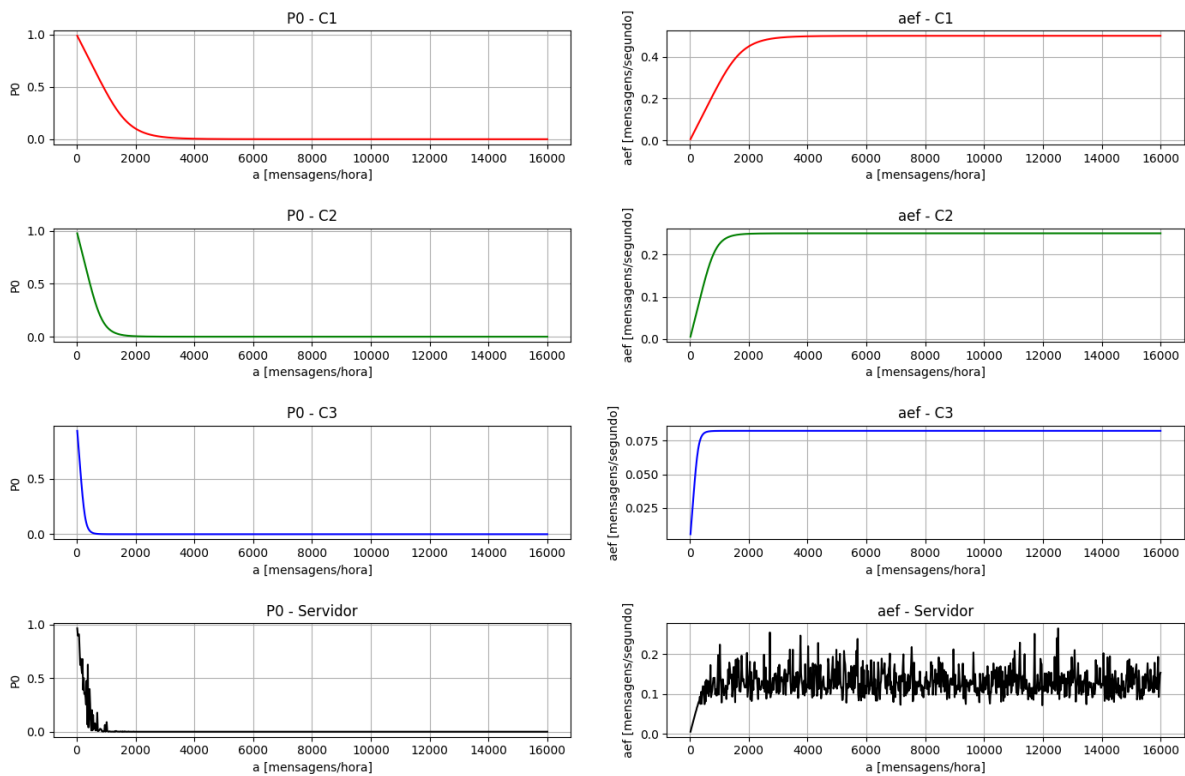


Figura 3: Gráficos de $P0$ e aef em função de a , simulado para valores a entre 20 e 1600

Simulação	a(msg/h)	Tr - C1	Lw - C1	Tr - C2	Lw - C2	Tr - C3	Lw - C3
1	20	2.0225	0.0001	4.0909	0.0005	13.0295	0.0049
2	40	2.0455	0.0005	4.1860	0.0021	14.0458	0.0211
3	60	2.0690	0.0011	4.2857	0.0048	15.2301	0.0513
4	80	2.0930	0.0021	4.3902	0.0087	16.6156	0.0992
5	100	2.1176	0.0033	4.5000	0.0139	18.2317	0.1688
6	120	2.1429	0.0048	4.6152	0.0205	20.0970	0.2642
7	140	2.1687	0.0066	4.7365	0.0286	22.2128	0.3890
8	160	2.1951	0.0087	4.8641	0.0384	24.5595	0.5452
9	180	2.2222	0.0111	4.9985	0.0499	27.0970	0.7321
10	200	2.2500	0.0139	5.1400	0.0633	29.7690	0.9467
11	220	2.2784	0.0170	5.2890	0.0788	32.5102	1.1829
12	240	2.3076	0.0205	5.4459	0.0964	35.2546	1.4331
13	260	2.3376	0.0244	5.6110	0.1163	37.9422	1.6890
14	280	2.3683	0.0286	5.7847	0.1387	40.5242	1.9425
15	300	2.3997	0.0333	5.9670	0.1638	42.9652	2.1873
16	320	2.4321	0.0384	6.1583	0.1916	45.2424	2.4184
17	340	2.4652	0.0439	6.3586	0.2224	47.3447	2.6329
18	360	2.4992	0.0499	6.5680	0.2562	49.2699	2.8293
19	380	2.5341	0.0564	6.7863	0.2931	51.0226	3.0074
20	400	2.5700	0.0633	7.0136	0.3334	52.6115	3.1677
21	420	2.6068	0.0708	7.2495	0.3770	54.0482	3.3113
22	440	2.6445	0.0788	7.4939	0.4240	55.3453	3.4396
23	460	2.6832	0.0873	7.7462	0.4745	56.5159	3.5542
24	480	2.7230	0.0964	8.0061	0.5283	57.5725	3.6565
25	500	2.7637	0.1060	8.2730	0.5856	58.5271	3.7479
26	520	2.8055	0.1163	8.5463	0.6462	59.3907	3.8297
27	540	2.8484	0.1272	8.8255	0.7099	60.1732	3.9031
28	560	2.8923	0.1387	9.1096	0.7768	60.8836	3.9691
29	580	2.9374	0.1509	9.3982	0.8465	61.5299	4.0285
30	600	2.9835	0.1638	9.6902	0.9189	62.1191	4.0823
31	620	3.0308	0.1773	9.9851	0.9938	62.6576	4.1310
32	640	3.0792	0.1916	10.2819	1.0708	63.1508	4.1753
33	660	3.1287	0.2066	10.5799	1.1498	63.6035	4.2157
34	680	3.1793	0.2224	10.8783	1.2305	64.0201	4.2526
35	700	3.2311	0.2389	11.1763	1.3125	64.4043	4.2865
36	720	3.2840	0.2562	11.4733	1.3955	64.7593	4.3176
37	740	3.3380	0.2743	11.7686	1.4793	65.0881	4.3463
38	760	3.3932	0.2931	12.0614	1.5635	65.3933	4.3728
39	780	3.4494	0.3129	12.3512	1.6479	65.6771	4.3973
40	800	3.5068	0.3334	12.6375	1.7321	65.9416	4.4201
41	820	3.5652	0.3548	12.9197	1.8159	66.1885	4.4413
42	840	3.6248	0.3770	13.1974	1.8992	66.4194	4.4610
43	860	3.6853	0.4001	13.4703	1.9815	66.6358	4.4795
44	880	3.7469	0.4240	13.7379	2.0628	66.8389	4.4968
45	900	3.8095	0.4488	14.0000	2.1429	67.0297	4.5130
46	920	3.8731	0.4745	14.2563	2.2215	67.2095	4.5282
47	940	3.9376	0.5010	14.5067	2.2986	67.3789	4.5425
48	960	4.0030	0.5283	14.7510	2.3740	67.5390	4.5560
49	980	4.0693	0.5565	14.9891	2.4477	67.6903	4.5688
50	1000	4.1365	0.5856	15.2209	2.5195	67.8336	4.5808

51		1020		4.2045		0.6155		15.4463		2.5894		67.9694		4.5922	
52		1040		4.2732		0.6462		15.6654		2.6573		68.0984		4.6030	
53		1060		4.3426		0.6776		15.8782		2.7233		68.2209		4.6133	
54		1080		4.4127		0.7099		16.0847		2.7873		68.3375		4.6231	
55		1100		4.4835		0.7430		16.2850		2.8492		68.4486		4.6323	
56		1120		4.5548		0.7768		16.4791		2.9092		68.5545		4.6412	
57		1140		4.6267		0.8113		16.6672		2.9672		68.6556		4.6496	
58		1160		4.6991		0.8465		16.8493		3.0233		68.7522		4.6577	
59		1180		4.7719		0.8824		17.0257		3.0774		68.8445		4.6653	
60		1200		4.8451		0.9189		17.1963		3.1297		68.9329		4.6727	
61		1220		4.9187		0.9560		17.3614		3.1801		69.0176		4.6797	
62		1240		4.9925		0.9938		17.5211		3.2287		69.0988		4.6865	
63		1260		5.0666		1.0320		17.6756		3.2756		69.1767		4.6930	
64		1280		5.1409		1.0708		17.8250		3.3207		69.2516		4.6992	
65		1300		5.2154		1.1101		17.9694		3.3643		69.3235		4.7051	
66		1320		5.2899		1.1498		18.1090		3.4062		69.3927		4.7109	
67		1340		5.3645		1.1900		18.2440		3.4466		69.4593		4.7164	
68		1360		5.4391		1.2305		18.3745		3.4855		69.5234		4.7217	
69		1380		5.5137		1.2713		18.5006		3.5230		69.5852		4.7268	
70		1400		5.5882		1.3125		18.6226		3.5591		69.6448		4.7317	
71		1420		5.6625		1.3539		18.7405		3.5939		69.7023		4.7365	
72		1440		5.7367		1.3955		18.8545		3.6274		69.7579		4.7411	
73		1460		5.8106		1.4373		18.9648		3.6597		69.8115		4.7455	
74		1480		5.8843		1.4793		19.0714		3.6908		69.8634		4.7498	
75		1500		5.9577		1.5213		19.1745		3.7208		69.9136		4.7540	
76		1520		6.0307		1.5635		19.2743		3.7497		69.9621		4.7580	
77		1540		6.1034		1.6057		19.3709		3.7776		70.0091		4.7619	
78		1560		6.1756		1.6479		19.4643		3.8044		70.0547		4.7656	
79		1580		6.2474		1.6900		19.5547		3.8304		70.0988		4.7693	
80		1600		6.3187		1.7321		19.6422		3.8554		70.1416		4.7728	
81		1620		6.3896		1.7741		19.7270		3.8795		70.1831		4.7762	
82		1640		6.4599		1.8159		19.8091		3.9028		70.2234		4.7796	
83		1660		6.5296		1.8576		19.8886		3.9253		70.2625		4.7828	
84		1680		6.5987		1.8992		19.9656		3.9470		70.3005		4.7859	
85		1700		6.6672		1.9405		20.0403		3.9680		70.3374		4.7890	
86		1720		6.7351		1.9815		20.1127		3.9883		70.3733		4.7919	
87		1740		6.8024		2.0223		20.1828		4.0079		70.4082		4.7948	
88		1760		6.8689		2.0628		20.2509		4.0269		70.4421		4.7976	
89		1780		6.9348		2.1030		20.3169		4.0452		70.4752		4.8003	
90		1800		7.0000		2.1429		20.3810		4.0630		70.5074		4.8030	
91		1820		7.0645		2.1824		20.4431		4.0802		70.5387		4.8056	
92		1840		7.1282		2.2215		20.5034		4.0968		70.5692		4.8081	
93		1860		7.1911		2.2602		20.5620		4.1129		70.5990		4.8105	
94		1880		7.2534		2.2986		20.6189		4.1285		70.6280		4.8129	
95		1900		7.3148		2.3365		20.6742		4.1436		70.6562		4.8153	
96		1920		7.3755		2.3740		20.7279		4.1583		70.6838		4.8175	
97		1940		7.4354		2.4111		20.7801		4.1725		70.7107		4.8198	
98		1960		7.4945		2.4477		20.8309		4.1863		70.7370		4.8219	
99		1980		7.5529		2.4838		20.8802		4.1997		70.7627		4.8240	
100		2000		7.6104		2.5195		20.9282		4.2127		70.7877		4.8261	
101		2020		7.6672		2.5547		20.9749		4.2253		70.8122		4.8281	
102		2040		7.7232		2.5894		21.0204		4.2375		70.8361		4.8301	

103	2060	7.7783	2.6236	21.0646	4.2494	70.8595	4.8320
104	2080	7.8327	2.6573	21.1077	4.2610	70.8823	4.8339
105	2100	7.8863	2.6905	21.1496	4.2722	70.9047	4.8357
106	2120	7.9391	2.7233	21.1905	4.2831	70.9265	4.8375
107	2140	7.9911	2.7555	21.2303	4.2937	70.9479	4.8393
108	2160	8.0423	2.7873	21.2691	4.3041	70.9688	4.8410
109	2180	8.0928	2.8185	21.3069	4.3141	70.9893	4.8427
110	2200	8.1425	2.8492	21.3438	4.3239	71.0094	4.8444
111	2220	8.1914	2.8795	21.3798	4.3334	71.0290	4.8460
112	2240	8.2395	2.9092	21.4148	4.3427	71.0483	4.8476
113	2260	8.2869	2.9385	21.4490	4.3518	71.0671	4.8491
114	2280	8.3336	2.9672	21.4824	4.3606	71.0856	4.8506
115	2300	8.3795	2.9955	21.5150	4.3692	71.1037	4.8521
116	2320	8.4247	3.0233	21.5469	4.3776	71.1214	4.8536
117	2340	8.4691	3.0506	21.5779	4.3857	71.1388	4.8550
118	2360	8.5128	3.0774	21.6083	4.3937	71.1558	4.8564
119	2380	8.5558	3.1038	21.6380	4.4015	71.1726	4.8578
120	2400	8.5982	3.1297	21.6669	4.4090	71.1890	4.8592
121	2420	8.6398	3.1551	21.6952	4.4165	71.2051	4.8605
122	2440	8.6807	3.1801	21.7229	4.4237	71.2209	4.8618
123	2460	8.7210	3.2046	21.7500	4.4307	71.2364	4.8631
124	2480	8.7606	3.2287	21.7765	4.4376	71.2516	4.8643
125	2500	8.7995	3.2524	21.8024	4.4444	71.2666	4.8656
126	2520	8.8378	3.2756	21.8277	4.4510	71.2813	4.8668
127	2540	8.8755	3.2984	21.8525	4.4574	71.2957	4.8679
128	2560	8.9125	3.3207	21.8767	4.4637	71.3099	4.8691
129	2580	8.9489	3.3427	21.9005	4.4699	71.3238	4.8703
130	2600	8.9847	3.3643	21.9237	4.4759	71.3375	4.8714
131	2620	9.0199	3.3854	21.9465	4.4818	71.3509	4.8725
132	2640	9.0545	3.4062	21.9688	4.4875	71.3641	4.8736
133	2660	9.0885	3.4266	21.9906	4.4932	71.3771	4.8747
134	2680	9.1220	3.4466	22.0120	4.4987	71.3899	4.8757
135	2700	9.1549	3.4662	22.0330	4.5041	71.4024	4.8767
136	2720	9.1872	3.4855	22.0535	4.5094	71.4148	4.8778
137	2740	9.2190	3.5044	22.0737	4.5146	71.4269	4.8788
138	2760	9.2503	3.5230	22.0934	4.5197	71.4389	4.8797
139	2780	9.2811	3.5412	22.1128	4.5247	71.4507	4.8807
140	2800	9.3113	3.5591	22.1318	4.5295	71.4622	4.8817
141	2820	9.3410	3.5767	22.1504	4.5343	71.4736	4.8826
142	2840	9.3702	3.5939	22.1687	4.5390	71.4848	4.8835
143	2860	9.3990	3.6108	22.1866	4.5436	71.4959	4.8844
144	2880	9.4273	3.6274	22.2042	4.5481	71.5067	4.8853
145	2900	9.4551	3.6437	22.2215	4.5526	71.5174	4.8862
146	2920	9.4824	3.6597	22.2384	4.5569	71.5280	4.8871
147	2940	9.5093	3.6754	22.2551	4.5612	71.5384	4.8879
148	2960	9.5357	3.6908	22.2714	4.5653	71.5486	4.8888
149	2980	9.5617	3.7059	22.2875	4.5694	71.5586	4.8896
150	3000	9.5873	3.7208	22.3032	4.5735	71.5686	4.8904
151	3020	9.6124	3.7354	22.3187	4.5774	71.5783	4.8912
152	3040	9.6372	3.7497	22.3339	4.5813	71.5880	4.8920
153	3060	9.6615	3.7638	22.3489	4.5851	71.5975	4.8928
154	3080	9.6854	3.7776	22.3636	4.5889	71.6068	4.8936

155	3100	9.7090	3.7911	22.3780	4.5926	71.6160	4.8943
156	3120	9.7321	3.8044	22.3922	4.5962	71.6251	4.8951
157	3140	9.7549	3.8175	22.4062	4.5997	71.6341	4.8958
158	3160	9.7774	3.8304	22.4199	4.6032	71.6429	4.8965
159	3180	9.7994	3.8430	22.4334	4.6066	71.6517	4.8973
160	3200	9.8211	3.8554	22.4467	4.6100	71.6603	4.8980
161	3220	9.8425	3.8676	22.4597	4.6133	71.6687	4.8987
162	3240	9.8635	3.8795	22.4726	4.6166	71.6771	4.8993
163	3260	9.8842	3.8913	22.4852	4.6198	71.6853	4.9000
164	3280	9.9045	3.9028	22.4976	4.6230	71.6935	4.9007
165	3300	9.9246	3.9142	22.5099	4.6261	71.7015	4.9014
166	3320	9.9443	3.9253	22.5219	4.6291	71.7094	4.9020
167	3340	9.9637	3.9363	22.5338	4.6321	71.7173	4.9027
168	3360	9.9828	3.9470	22.5455	4.6351	71.7250	4.9033
169	3380	10.0016	3.9576	22.5569	4.6380	71.7326	4.9039
170	3400	10.0202	3.9680	22.5683	4.6409	71.7401	4.9045
171	3420	10.0384	3.9783	22.5794	4.6437	71.7476	4.9051
172	3440	10.0563	3.9883	22.5904	4.6465	71.7549	4.9057
173	3460	10.0740	3.9982	22.6012	4.6492	71.7621	4.9063
174	3480	10.0914	4.0079	22.6118	4.6519	71.7693	4.9069
175	3500	10.1086	4.0175	22.6223	4.6546	71.7763	4.9075
176	3520	10.1254	4.0269	22.6327	4.6572	71.7833	4.9081
177	3540	10.1421	4.0361	22.6428	4.6598	71.7902	4.9087
178	3560	10.1585	4.0452	22.6529	4.6623	71.7970	4.9092
179	3580	10.1746	4.0542	22.6628	4.6648	71.8037	4.9098
180	3600	10.1905	4.0630	22.6725	4.6673	71.8103	4.9103
181	3620	10.2061	4.0717	22.6821	4.6697	71.8169	4.9109
182	3640	10.2216	4.0802	22.6916	4.6721	71.8234	4.9114
183	3660	10.2368	4.0886	22.7010	4.6745	71.8298	4.9119
184	3680	10.2517	4.0968	22.7102	4.6768	71.8361	4.9124
185	3700	10.2665	4.1049	22.7193	4.6791	71.8423	4.9129
186	3720	10.2810	4.1129	22.7282	4.6813	71.8485	4.9135
187	3740	10.2953	4.1208	22.7371	4.6836	71.8546	4.9140
188	3760	10.3095	4.1285	22.7458	4.6858	71.8607	4.9145
189	3780	10.3234	4.1361	22.7544	4.6879	71.8666	4.9149
190	3800	10.3371	4.1436	22.7629	4.6901	71.8725	4.9154
191	3820	10.3506	4.1510	22.7712	4.6922	71.8784	4.9159
192	3840	10.3640	4.1583	22.7795	4.6943	71.8841	4.9164
193	3860	10.3771	4.1655	22.7876	4.6963	71.8898	4.9169
194	3880	10.3901	4.1725	22.7957	4.6984	71.8955	4.9173
195	3900	10.4028	4.1795	22.8036	4.7004	71.9010	4.9178
196	3920	10.4154	4.1863	22.8115	4.7023	71.9066	4.9182
197	3940	10.4279	4.1930	22.8192	4.7043	71.9120	4.9187
198	3960	10.4401	4.1997	22.8268	4.7062	71.9174	4.9191
199	3980	10.4522	4.2062	22.8344	4.7081	71.9227	4.9196
200	4000	10.4641	4.2127	22.8418	4.7100	71.9280	4.9200
201	4020	10.4759	4.2190	22.8492	4.7118	71.9332	4.9204
202	4040	10.4875	4.2253	22.8564	4.7137	71.9384	4.9209
203	4060	10.4989	4.2314	22.8636	4.7155	71.9435	4.9213
204	4080	10.5102	4.2375	22.8707	4.7172	71.9486	4.9217
205	4100	10.5213	4.2435	22.8777	4.7190	71.9536	4.9221
206	4120	10.5323	4.2494	22.8846	4.7207	71.9585	4.9225

207	4140	10.5432	4.2552	22.8914	4.7225	71.9634	4.9229
208	4160	10.5538	4.2610	22.8982	4.7242	71.9683	4.9233
209	4180	10.5644	4.2666	22.9048	4.7258	71.9731	4.9237
210	4200	10.5748	4.2722	22.9114	4.7275	71.9778	4.9241
211	4220	10.5851	4.2777	22.9179	4.7291	71.9825	4.9245
212	4240	10.5952	4.2831	22.9244	4.7307	71.9872	4.9249
213	4260	10.6053	4.2885	22.9307	4.7323	71.9918	4.9252
214	4280	10.6152	4.2937	22.9370	4.7339	71.9963	4.9256
215	4300	10.6249	4.2989	22.9432	4.7355	72.0008	4.9260
216	4320	10.6346	4.3041	22.9493	4.7370	72.0053	4.9264
217	4340	10.6441	4.3091	22.9554	4.7386	72.0097	4.9267
218	4360	10.6535	4.3141	22.9614	4.7401	72.0141	4.9271
219	4380	10.6627	4.3191	22.9673	4.7415	72.0185	4.9274
220	4400	10.6719	4.3239	22.9732	4.7430	72.0228	4.9278
221	4420	10.6809	4.3287	22.9790	4.7445	72.0270	4.9281
222	4440	10.6899	4.3334	22.9847	4.7459	72.0312	4.9285
223	4460	10.6987	4.3381	22.9904	4.7473	72.0354	4.9288
224	4480	10.7074	4.3427	22.9960	4.7487	72.0395	4.9292
225	4500	10.7160	4.3473	23.0015	4.7501	72.0436	4.9295
226	4520	10.7245	4.3518	23.0070	4.7515	72.0477	4.9298
227	4540	10.7329	4.3562	23.0124	4.7529	72.0517	4.9302
228	4560	10.7412	4.3606	23.0178	4.7542	72.0557	4.9305
229	4580	10.7494	4.3649	23.0231	4.7556	72.0596	4.9308
230	4600	10.7575	4.3692	23.0284	4.7569	72.0635	4.9312
231	4620	10.7655	4.3734	23.0336	4.7582	72.0674	4.9315
232	4640	10.7734	4.3776	23.0387	4.7595	72.0712	4.9318
233	4660	10.7812	4.3817	23.0438	4.7608	72.0750	4.9321
234	4680	10.7890	4.3857	23.0488	4.7620	72.0788	4.9324
235	4700	10.7966	4.3897	23.0538	4.7633	72.0825	4.9327
236	4720	10.8041	4.3937	23.0587	4.7645	72.0862	4.9330
237	4740	10.8116	4.3976	23.0636	4.7657	72.0899	4.9333
238	4760	10.8190	4.4015	23.0685	4.7669	72.0935	4.9336
239	4780	10.8263	4.4053	23.0732	4.7681	72.0971	4.9339
240	4800	10.8335	4.4090	23.0780	4.7693	72.1007	4.9342
241	4820	10.8406	4.4128	23.0826	4.7705	72.1042	4.9345
242	4840	10.8476	4.4165	23.0873	4.7717	72.1077	4.9348
243	4860	10.8546	4.4201	23.0919	4.7728	72.1112	4.9351
244	4880	10.8615	4.4237	23.0964	4.7740	72.1146	4.9354
245	4900	10.8683	4.4272	23.1009	4.7751	72.1180	4.9356
246	4920	10.8750	4.4307	23.1054	4.7762	72.1214	4.9359
247	4940	10.8817	4.4342	23.1098	4.7773	72.1248	4.9362
248	4960	10.8882	4.4376	23.1142	4.7784	72.1281	4.9365
249	4980	10.8947	4.4410	23.1185	4.7795	72.1314	4.9367
250	5000	10.9012	4.4444	23.1228	4.7806	72.1346	4.9370
251	5020	10.9075	4.4477	23.1270	4.7816	72.1379	4.9373
252	5040	10.9138	4.4510	23.1312	4.7827	72.1411	4.9375
253	5060	10.9201	4.4542	23.1354	4.7837	72.1443	4.9378
254	5080	10.9262	4.4574	23.1395	4.7848	72.1474	4.9381
255	5100	10.9323	4.4606	23.1436	4.7858	72.1506	4.9383
256	5120	10.9384	4.4637	23.1476	4.7868	72.1537	4.9386
257	5140	10.9443	4.4668	23.1516	4.7878	72.1568	4.9388
258	5160	10.9502	4.4699	23.1556	4.7888	72.1598	4.9391

259	5180	10.9561	4.4729	23.1595	4.7898	72.1629	4.9393
260	5200	10.9619	4.4759	23.1634	4.7908	72.1659	4.9396
261	5220	10.9676	4.4788	23.1673	4.7917	72.1688	4.9398
262	5240	10.9732	4.4818	23.1711	4.7927	72.1718	4.9401
263	5260	10.9788	4.4847	23.1749	4.7936	72.1747	4.9403
264	5280	10.9844	4.4875	23.1787	4.7946	72.1776	4.9405
265	5300	10.9899	4.4904	23.1824	4.7955	72.1805	4.9408
266	5320	10.9953	4.4932	23.1861	4.7964	72.1834	4.9410
267	5340	11.0007	4.4960	23.1897	4.7973	72.1862	4.9413
268	5360	11.0060	4.4987	23.1934	4.7983	72.1891	4.9415
269	5380	11.0113	4.5014	23.1970	4.7992	72.1919	4.9417
270	5400	11.0165	4.5041	23.2005	4.8000	72.1946	4.9419
271	5420	11.0216	4.5068	23.2040	4.8009	72.1974	4.9422
272	5440	11.0268	4.5094	23.2075	4.8018	72.2001	4.9424
273	5460	11.0318	4.5120	23.2110	4.8027	72.2028	4.9426
274	5480	11.0368	4.5146	23.2144	4.8035	72.2055	4.9428
275	5500	11.0418	4.5172	23.2179	4.8044	72.2082	4.9431
276	5520	11.0467	4.5197	23.2212	4.8052	72.2108	4.9433
277	5540	11.0516	4.5222	23.2246	4.8061	72.2135	4.9435
278	5560	11.0564	4.5247	23.2279	4.8069	72.2161	4.9437
279	5580	11.0612	4.5271	23.2312	4.8077	72.2187	4.9439
280	5600	11.0659	4.5295	23.2345	4.8085	72.2212	4.9441
281	5620	11.0706	4.5320	23.2377	4.8094	72.2238	4.9443
282	5640	11.0752	4.5343	23.2409	4.8102	72.2263	4.9446
283	5660	11.0798	4.5367	23.2441	4.8110	72.2288	4.9448
284	5680	11.0843	4.5390	23.2472	4.8117	72.2313	4.9450
285	5700	11.0888	4.5413	23.2504	4.8125	72.2338	4.9452
286	5720	11.0933	4.5436	23.2535	4.8133	72.2362	4.9454
287	5740	11.0977	4.5459	23.2566	4.8141	72.2387	4.9456
288	5760	11.1021	4.5481	23.2596	4.8148	72.2411	4.9458
289	5780	11.1064	4.5504	23.2626	4.8156	72.2435	4.9460
290	5800	11.1107	4.5526	23.2656	4.8164	72.2459	4.9462
291	5820	11.1150	4.5547	23.2686	4.8171	72.2483	4.9464
292	5840	11.1192	4.5569	23.2716	4.8178	72.2506	4.9466
293	5860	11.1234	4.5590	23.2745	4.8186	72.2530	4.9467
294	5880	11.1275	4.5612	23.2774	4.8193	72.2553	4.9469
295	5900	11.1316	4.5633	23.2803	4.8200	72.2576	4.9471
296	5920	11.1357	4.5653	23.2832	4.8207	72.2599	4.9473
297	5940	11.1397	4.5674	23.2860	4.8215	72.2621	4.9475
298	5960	11.1437	4.5694	23.2888	4.8222	72.2644	4.9477
299	5980	11.1477	4.5715	23.2916	4.8229	72.2666	4.9479
300	6000	11.1516	4.5735	23.2944	4.8236	72.2688	4.9481
301	6020	11.1555	4.5755	23.2971	4.8242	72.2710	4.9482
302	6040	11.1594	4.5774	23.2999	4.8249	72.2732	4.9484
303	6060	11.1632	4.5794	23.3026	4.8256	72.2754	4.9486
304	6080	11.1670	4.5813	23.3053	4.8263	72.2776	4.9488
305	6100	11.1707	4.5832	23.3079	4.8269	72.2797	4.9489
306	6120	11.1744	4.5851	23.3106	4.8276	72.2818	4.9491
307	6140	11.1781	4.5870	23.3132	4.8283	72.2840	4.9493
308	6160	11.1818	4.5889	23.3158	4.8289	72.2861	4.9495
309	6180	11.1854	4.5907	23.3184	4.8296	72.2881	4.9496
310	6200	11.1890	4.5926	23.3210	4.8302	72.2902	4.9498

311	6220	11.1926	4.5944	23.3235	4.8308	72.2923	4.9500
312	6240	11.1961	4.5962	23.3261	4.8315	72.2943	4.9501
313	6260	11.1996	4.5980	23.3286	4.8321	72.2963	4.9503
314	6280	11.2031	4.5997	23.3311	4.8327	72.2984	4.9505
315	6300	11.2065	4.6015	23.3335	4.8333	72.3004	4.9506
316	6320	11.2099	4.6032	23.3360	4.8340	72.3024	4.9508
317	6340	11.2133	4.6049	23.3384	4.8346	72.3043	4.9510
318	6360	11.2167	4.6066	23.3409	4.8352	72.3063	4.9511
319	6380	11.2200	4.6083	23.3433	4.8358	72.3083	4.9513
320	6400	11.2233	4.6100	23.3456	4.8364	72.3102	4.9515
321	6420	11.2266	4.6117	23.3480	4.8370	72.3121	4.9516
322	6440	11.2299	4.6133	23.3504	4.8376	72.3140	4.9518
323	6460	11.2331	4.6150	23.3527	4.8381	72.3159	4.9519
324	6480	11.2363	4.6166	23.3550	4.8387	72.3178	4.9521
325	6500	11.2395	4.6182	23.3573	4.8393	72.3197	4.9522
326	6520	11.2426	4.6198	23.3596	4.8399	72.3216	4.9524
327	6540	11.2457	4.6214	23.3619	4.8404	72.3234	4.9525
328	6560	11.2488	4.6230	23.3641	4.8410	72.3253	4.9527
329	6580	11.2519	4.6245	23.3664	4.8416	72.3271	4.9528
330	6600	11.2549	4.6261	23.3686	4.8421	72.3289	4.9530
331	6620	11.2580	4.6276	23.3708	4.8427	72.3307	4.9531
332	6640	11.2610	4.6291	23.3730	4.8432	72.3325	4.9533
333	6660	11.2639	4.6307	23.3751	4.8438	72.3343	4.9534
334	6680	11.2669	4.6321	23.3773	4.8443	72.3361	4.9536
335	6700	11.2698	4.6336	23.3795	4.8448	72.3378	4.9537
336	6720	11.2727	4.6351	23.3816	4.8454	72.3396	4.9539
337	6740	11.2756	4.6366	23.3837	4.8459	72.3413	4.9540
338	6760	11.2785	4.6380	23.3858	4.8464	72.3430	4.9542
339	6780	11.2813	4.6395	23.3879	4.8469	72.3448	4.9543
340	6800	11.2841	4.6409	23.3900	4.8475	72.3465	4.9544
341	6820	11.2869	4.6423	23.3920	4.8480	72.3482	4.9546
342	6840	11.2897	4.6437	23.3941	4.8485	72.3499	4.9547
343	6860	11.2925	4.6451	23.3961	4.8490	72.3515	4.9549
344	6880	11.2952	4.6465	23.3981	4.8495	72.3532	4.9550
345	6900	11.2979	4.6479	23.4001	4.8500	72.3549	4.9551
346	6920	11.3006	4.6492	23.4021	4.8505	72.3565	4.9553
347	6940	11.3033	4.6506	23.4041	4.8510	72.3581	4.9554
348	6960	11.3059	4.6519	23.4061	4.8515	72.3598	4.9555
349	6980	11.3085	4.6533	23.4080	4.8520	72.3614	4.9557
350	7000	11.3112	4.6546	23.4099	4.8525	72.3630	4.9558
351	7020	11.3138	4.6559	23.4119	4.8529	72.3646	4.9559
352	7040	11.3163	4.6572	23.4138	4.8534	72.3662	4.9561
353	7060	11.3189	4.6585	23.4157	4.8539	72.3677	4.9562
354	7080	11.3214	4.6598	23.4176	4.8544	72.3693	4.9563
355	7100	11.3239	4.6610	23.4195	4.8548	72.3709	4.9565
356	7120	11.3264	4.6623	23.4213	4.8553	72.3724	4.9566
357	7140	11.3289	4.6636	23.4232	4.8558	72.3740	4.9567
358	7160	11.3314	4.6648	23.4250	4.8562	72.3755	4.9568
359	7180	11.3338	4.6660	23.4268	4.8567	72.3770	4.9570
360	7200	11.3363	4.6673	23.4287	4.8571	72.3785	4.9571
361	7220	11.3387	4.6685	23.4305	4.8576	72.3800	4.9572
362	7240	11.3411	4.6697	23.4323	4.8581	72.3815	4.9573

363	7260	11.3434	4.6709	23.4340	4.8585	72.3830	4.9575
364	7280	11.3458	4.6721	23.4358	4.8589	72.3845	4.9576
365	7300	11.3482	4.6733	23.4376	4.8594	72.3860	4.9577
366	7320	11.3505	4.6745	23.4393	4.8598	72.3875	4.9578
367	7340	11.3528	4.6756	23.4411	4.8603	72.3889	4.9579
368	7360	11.3551	4.6768	23.4428	4.8607	72.3904	4.9581
369	7380	11.3574	4.6779	23.4445	4.8611	72.3918	4.9582
370	7400	11.3596	4.6791	23.4462	4.8615	72.3932	4.9583
371	7420	11.3619	4.6802	23.4479	4.8620	72.3946	4.9584
372	7440	11.3641	4.6813	23.4496	4.8624	72.3961	4.9585
373	7460	11.3663	4.6825	23.4513	4.8628	72.3975	4.9586
374	7480	11.3685	4.6836	23.4530	4.8632	72.3989	4.9588
375	7500	11.3707	4.6847	23.4546	4.8636	72.4003	4.9589
376	7520	11.3729	4.6858	23.4563	4.8641	72.4016	4.9590
377	7540	11.3750	4.6869	23.4579	4.8645	72.4030	4.9591
378	7560	11.3772	4.6879	23.4595	4.8649	72.4044	4.9592
379	7580	11.3793	4.6890	23.4611	4.8653	72.4057	4.9593
380	7600	11.3814	4.6901	23.4628	4.8657	72.4071	4.9594
381	7620	11.3835	4.6911	23.4644	4.8661	72.4084	4.9595
382	7640	11.3856	4.6922	23.4659	4.8665	72.4098	4.9597
383	7660	11.3877	4.6932	23.4675	4.8669	72.4111	4.9598
384	7680	11.3897	4.6943	23.4691	4.8673	72.4124	4.9599
385	7700	11.3918	4.6953	23.4706	4.8677	72.4138	4.9600
386	7720	11.3938	4.6963	23.4722	4.8680	72.4151	4.9601
387	7740	11.3958	4.6973	23.4737	4.8684	72.4164	4.9602
388	7760	11.3978	4.6984	23.4753	4.8688	72.4177	4.9603
389	7780	11.3998	4.6994	23.4768	4.8692	72.4190	4.9604
390	7800	11.4018	4.7004	23.4783	4.8696	72.4202	4.9605
391	7820	11.4038	4.7014	23.4798	4.8699	72.4215	4.9606
392	7840	11.4057	4.7023	23.4813	4.8703	72.4228	4.9607
393	7860	11.4077	4.7033	23.4828	4.8707	72.4240	4.9608
394	7880	11.4096	4.7043	23.4843	4.8711	72.4253	4.9609
395	7900	11.4115	4.7052	23.4858	4.8714	72.4265	4.9610
396	7920	11.4134	4.7062	23.4872	4.8718	72.4278	4.9611
397	7940	11.4153	4.7072	23.4887	4.8722	72.4290	4.9612
398	7960	11.4172	4.7081	23.4901	4.8725	72.4303	4.9613
399	7980	11.4191	4.7090	23.4916	4.8729	72.4315	4.9614
400	8000	11.4209	4.7100	23.4930	4.8732	72.4327	4.9615
401	8020	11.4228	4.7109	23.4944	4.8736	72.4339	4.9616
402	8040	11.4246	4.7118	23.4958	4.8740	72.4351	4.9617
403	8060	11.4264	4.7128	23.4973	4.8743	72.4363	4.9618
404	8080	11.4282	4.7137	23.4987	4.8747	72.4375	4.9619
405	8100	11.4300	4.7146	23.5000	4.8750	72.4387	4.9620
406	8120	11.4318	4.7155	23.5014	4.8753	72.4399	4.9621
407	8140	11.4336	4.7164	23.5028	4.8757	72.4410	4.9622
408	8160	11.4353	4.7172	23.5042	4.8760	72.4422	4.9623
409	8180	11.4371	4.7181	23.5055	4.8764	72.4434	4.9624
410	8200	11.4388	4.7190	23.5069	4.8767	72.4445	4.9625
411	8220	11.4406	4.7199	23.5082	4.8771	72.4457	4.9626
412	8240	11.4423	4.7207	23.5096	4.8774	72.4468	4.9627
413	8260	11.4440	4.7216	23.5109	4.8777	72.4479	4.9628
414	8280	11.4457	4.7225	23.5122	4.8781	72.4491	4.9629

415	8300	11.4474	4.7233	23.5136	4.8784	72.4502	4.9630
416	8320	11.4491	4.7242	23.5149	4.8787	72.4513	4.9631
417	8340	11.4508	4.7250	23.5162	4.8790	72.4524	4.9632
418	8360	11.4524	4.7258	23.5175	4.8794	72.4536	4.9633
419	8380	11.4541	4.7267	23.5188	4.8797	72.4547	4.9633
420	8400	11.4557	4.7275	23.5200	4.8800	72.4558	4.9634
421	8420	11.4573	4.7283	23.5213	4.8803	72.4569	4.9635
422	8440	11.4590	4.7291	23.5226	4.8806	72.4579	4.9636
423	8460	11.4606	4.7299	23.5238	4.8810	72.4590	4.9637
424	8480	11.4622	4.7307	23.5251	4.8813	72.4601	4.9638
425	8500	11.4638	4.7315	23.5263	4.8816	72.4612	4.9639
426	8520	11.4654	4.7323	23.5276	4.8819	72.4622	4.9640
427	8540	11.4669	4.7331	23.5288	4.8822	72.4633	4.9641
428	8560	11.4685	4.7339	23.5301	4.8825	72.4644	4.9641
429	8580	11.4700	4.7347	23.5313	4.8828	72.4654	4.9642
430	8600	11.4716	4.7355	23.5325	4.8831	72.4665	4.9643
431	8620	11.4731	4.7363	23.5337	4.8834	72.4675	4.9644
432	8640	11.4747	4.7370	23.5349	4.8837	72.4685	4.9645
433	8660	11.4762	4.7378	23.5361	4.8840	72.4696	4.9646
434	8680	11.4777	4.7386	23.5373	4.8843	72.4706	4.9647
435	8700	11.4792	4.7393	23.5385	4.8846	72.4716	4.9647
436	8720	11.4807	4.7401	23.5397	4.8849	72.4726	4.9648
437	8740	11.4822	4.7408	23.5408	4.8852	72.4736	4.9649
438	8760	11.4837	4.7415	23.5420	4.8855	72.4747	4.9650
439	8780	11.4851	4.7423	23.5432	4.8858	72.4757	4.9651
440	8800	11.4866	4.7430	23.5443	4.8861	72.4767	4.9652
441	8820	11.4880	4.7438	23.5455	4.8864	72.4776	4.9652
442	8840	11.4895	4.7445	23.5466	4.8867	72.4786	4.9653
443	8860	11.4909	4.7452	23.5478	4.8869	72.4796	4.9654
444	8880	11.4924	4.7459	23.5489	4.8872	72.4806	4.9655
445	8900	11.4938	4.7466	23.5500	4.8875	72.4816	4.9656
446	8920	11.4952	4.7473	23.5511	4.8878	72.4825	4.9656
447	8940	11.4966	4.7480	23.5523	4.8881	72.4835	4.9657
448	8960	11.4980	4.7487	23.5534	4.8883	72.4845	4.9658
449	8980	11.4994	4.7494	23.5545	4.8886	72.4854	4.9659
450	9000	11.5008	4.7501	23.5556	4.8889	72.4864	4.9660
451	9020	11.5021	4.7508	23.5567	4.8892	72.4873	4.9660
452	9040	11.5035	4.7515	23.5578	4.8894	72.4883	4.9661
453	9060	11.5049	4.7522	23.5588	4.8897	72.4892	4.9662
454	9080	11.5062	4.7529	23.5599	4.8900	72.4902	4.9663
455	9100	11.5076	4.7536	23.5610	4.8902	72.4911	4.9663
456	9120	11.5089	4.7542	23.5621	4.8905	72.4920	4.9664
457	9140	11.5102	4.7549	23.5631	4.8908	72.4929	4.9665
458	9160	11.5116	4.7556	23.5642	4.8910	72.4938	4.9666
459	9180	11.5129	4.7562	23.5652	4.8913	72.4948	4.9666
460	9200	11.5142	4.7569	23.5663	4.8916	72.4957	4.9667
461	9220	11.5155	4.7575	23.5673	4.8918	72.4966	4.9668
462	9240	11.5168	4.7582	23.5684	4.8921	72.4975	4.9669
463	9260	11.5181	4.7588	23.5694	4.8923	72.4984	4.9669
464	9280	11.5194	4.7595	23.5704	4.8926	72.4993	4.9670
465	9300	11.5206	4.7601	23.5714	4.8929	72.5002	4.9671
466	9320	11.5219	4.7608	23.5725	4.8931	72.5011	4.9672

467	9340	11.5232	4.7614	23.5735	4.8934	72.5019	4.9672
468	9360	11.5244	4.7620	23.5745	4.8936	72.5028	4.9673
469	9380	11.5257	4.7626	23.5755	4.8939	72.5037	4.9674
470	9400	11.5269	4.7633	23.5765	4.8941	72.5046	4.9675
471	9420	11.5281	4.7639	23.5775	4.8944	72.5054	4.9675
472	9440	11.5294	4.7645	23.5785	4.8946	72.5063	4.9676
473	9460	11.5306	4.7651	23.5795	4.8949	72.5071	4.9677
474	9480	11.5318	4.7657	23.5804	4.8951	72.5080	4.9677
475	9500	11.5330	4.7663	23.5814	4.8953	72.5089	4.9678
476	9520	11.5342	4.7669	23.5824	4.8956	72.5097	4.9679
477	9540	11.5354	4.7675	23.5834	4.8958	72.5105	4.9679
478	9560	11.5366	4.7681	23.5843	4.8961	72.5114	4.9680
479	9580	11.5378	4.7687	23.5853	4.8963	72.5122	4.9681
480	9600	11.5390	4.7693	23.5862	4.8966	72.5131	4.9682
481	9620	11.5402	4.7699	23.5872	4.8968	72.5139	4.9682
482	9640	11.5413	4.7705	23.5881	4.8970	72.5147	4.9683
483	9660	11.5425	4.7711	23.5891	4.8973	72.5155	4.9684
484	9680	11.5436	4.7717	23.5900	4.8975	72.5164	4.9684
485	9700	11.5448	4.7722	23.5909	4.8977	72.5172	4.9685
486	9720	11.5459	4.7728	23.5919	4.8980	72.5180	4.9686
487	9740	11.5471	4.7734	23.5928	4.8982	72.5188	4.9686
488	9760	11.5482	4.7740	23.5937	4.8984	72.5196	4.9687
489	9780	11.5493	4.7745	23.5946	4.8986	72.5204	4.9688
490	9800	11.5505	4.7751	23.5955	4.8989	72.5212	4.9688
491	9820	11.5516	4.7756	23.5964	4.8991	72.5220	4.9689
492	9840	11.5527	4.7762	23.5973	4.8993	72.5228	4.9690
493	9860	11.5538	4.7768	23.5982	4.8996	72.5236	4.9690
494	9880	11.5549	4.7773	23.5991	4.8998	72.5244	4.9691
495	9900	11.5560	4.7779	23.6000	4.9000	72.5251	4.9691
496	9920	11.5571	4.7784	23.6009	4.9002	72.5259	4.9692
497	9940	11.5582	4.7789	23.6018	4.9004	72.5267	4.9693
498	9960	11.5592	4.7795	23.6027	4.9007	72.5275	4.9693
499	9980	11.5603	4.7800	23.6035	4.9009	72.5282	4.9694
500	10000	11.5614	4.7806	23.6044	4.9011	72.5290	4.9695
501	10020	11.5624	4.7811	23.6053	4.9013	72.5298	4.9695
502	10040	11.5635	4.7816	23.6061	4.9015	72.5305	4.9696
503	10060	11.5646	4.7822	23.6070	4.9017	72.5313	4.9697
504	10080	11.5656	4.7827	23.6079	4.9020	72.5320	4.9697
505	10100	11.5666	4.7832	23.6087	4.9022	72.5328	4.9698
506	10120	11.5677	4.7837	23.6096	4.9024	72.5335	4.9698
507	10140	11.5687	4.7842	23.6104	4.9026	72.5343	4.9699
508	10160	11.5697	4.7848	23.6112	4.9028	72.5350	4.9700
509	10180	11.5708	4.7853	23.6121	4.9030	72.5358	4.9700
510	10200	11.5718	4.7858	23.6129	4.9032	72.5365	4.9701
511	10220	11.5728	4.7863	23.6137	4.9034	72.5372	4.9701
512	10240	11.5738	4.7868	23.6146	4.9036	72.5380	4.9702
513	10260	11.5748	4.7873	23.6154	4.9038	72.5387	4.9703
514	10280	11.5758	4.7878	23.6162	4.9041	72.5394	4.9703
515	10300	11.5768	4.7883	23.6170	4.9043	72.5401	4.9704
516	10320	11.5778	4.7888	23.6178	4.9045	72.5409	4.9704
517	10340	11.5788	4.7893	23.6187	4.9047	72.5416	4.9705
518	10360	11.5798	4.7898	23.6195	4.9049	72.5423	4.9706

519		10380		11.5807		4.7903		23.6203		4.9051		72.5430		4.9706	
520		10400		11.5817		4.7908		23.6211		4.9053		72.5437		4.9707	
521		10420		11.5827		4.7912		23.6219		4.9055		72.5444		4.9707	
522		10440		11.5836		4.7917		23.6227		4.9057		72.5451		4.9708	
523		10460		11.5846		4.7922		23.6234		4.9059		72.5458		4.9708	
524		10480		11.5856		4.7927		23.6242		4.9061		72.5465		4.9709	
525		10500		11.5865		4.7932		23.6250		4.9063		72.5472		4.9710	
526		10520		11.5875		4.7936		23.6258		4.9064		72.5479		4.9710	
527		10540		11.5884		4.7941		23.6266		4.9066		72.5486		4.9711	
528		10560		11.5893		4.7946		23.6273		4.9068		72.5492		4.9711	
529		10580		11.5903		4.7950		23.6281		4.9070		72.5499		4.9712	
530		10600		11.5912		4.7955		23.6289		4.9072		72.5506		4.9712	
531		10620		11.5921		4.7960		23.6296		4.9074		72.5513		4.9713	
532		10640		11.5930		4.7964		23.6304		4.9076		72.5520		4.9714	
533		10660		11.5940		4.7969		23.6312		4.9078		72.5526		4.9714	
534		10680		11.5949		4.7973		23.6319		4.9080		72.5533		4.9715	
535		10700		11.5958		4.7978		23.6327		4.9082		72.5540		4.9715	
536		10720		11.5967		4.7983		23.6334		4.9084		72.5546		4.9716	
537		10740		11.5976		4.7987		23.6342		4.9085		72.5553		4.9716	
538		10760		11.5985		4.7992		23.6349		4.9087		72.5560		4.9717	
539		10780		11.5994		4.7996		23.6356		4.9089		72.5566		4.9717	
540		10800		11.6003		4.8000		23.6364		4.9091		72.5573		4.9718	
541		10820		11.6011		4.8005		23.6371		4.9093		72.5579		4.9718	
542		10840		11.6020		4.8009		23.6378		4.9095		72.5586		4.9719	
543		10860		11.6029		4.8014		23.6386		4.9096		72.5592		4.9720	
544		10880		11.6038		4.8018		23.6393		4.9098		72.5599		4.9720	
545		10900		11.6046		4.8022		23.6400		4.9100		72.5605		4.9721	
546		10920		11.6055		4.8027		23.6407		4.9102		72.5611		4.9721	
547		10940		11.6064		4.8031		23.6414		4.9104		72.5618		4.9722	
548		10960		11.6072		4.8035		23.6422		4.9105		72.5624		4.9722	
549		10980		11.6081		4.8040		23.6429		4.9107		72.5630		4.9723	
550		11000		11.6089		4.8044		23.6436		4.9109		72.5637		4.9723	
551		11020		11.6098		4.8048		23.6443		4.9111		72.5643		4.9724	
552		11040		11.6106		4.8052		23.6450		4.9112		72.5649		4.9724	
553		11060		11.6115		4.8057		23.6457		4.9114		72.5655		4.9725	
554		11080		11.6123		4.8061		23.6464		4.9116		72.5662		4.9725	
555		11100		11.6131		4.8065		23.6471		4.9118		72.5668		4.9726	
556		11120		11.6139		4.8069		23.6478		4.9119		72.5674		4.9726	
557		11140		11.6148		4.8073		23.6484		4.9121		72.5680		4.9727	
558		11160		11.6156		4.8077		23.6491		4.9123		72.5686		4.9727	
559		11180		11.6164		4.8081		23.6498		4.9125		72.5692		4.9728	
560		11200		11.6172		4.8085		23.6505		4.9126		72.5698		4.9728	
561		11220		11.6180		4.8090		23.6512		4.9128		72.5704		4.9729	
562		11240		11.6188		4.8094		23.6518		4.9130		72.5710		4.9729	
563		11260		11.6197		4.8098		23.6525		4.9131		72.5716		4.9730	
564		11280		11.6205		4.8102		23.6532		4.9133		72.5722		4.9730	
565		11300		11.6212		4.8106		23.6539		4.9135		72.5728		4.9731	
566		11320		11.6220		4.8110		23.6545		4.9136		72.5734		4.9731	
567		11340		11.6228		4.8114		23.6552		4.9138		72.5740		4.9732	
568		11360		11.6236		4.8117		23.6558		4.9140		72.5746		4.9732	
569		11380		11.6244		4.8121		23.6565		4.9141		72.5752		4.9733	
570		11400		11.6252		4.8125		23.6571		4.9143		72.5758		4.9733	

571		11420		11.6260		4.8129		23.6578		4.9144		72.5764		4.9734	
572		11440		11.6267		4.8133		23.6584		4.9146		72.5769		4.9734	
573		11460		11.6275		4.8137		23.6591		4.9148		72.5775		4.9735	
574		11480		11.6283		4.8141		23.6597		4.9149		72.5781		4.9735	
575		11500		11.6290		4.8145		23.6604		4.9151		72.5787		4.9736	
576		11520		11.6298		4.8148		23.6610		4.9153		72.5793		4.9736	
577		11540		11.6306		4.8152		23.6617		4.9154		72.5798		4.9736	
578		11560		11.6313		4.8156		23.6623		4.9156		72.5804		4.9737	
579		11580		11.6321		4.8160		23.6629		4.9157		72.5810		4.9737	
580		11600		11.6328		4.8164		23.6636		4.9159		72.5815		4.9738	
581		11620		11.6336		4.8167		23.6642		4.9160		72.5821		4.9738	
582		11640		11.6343		4.8171		23.6648		4.9162		72.5826		4.9739	
583		11660		11.6351		4.8175		23.6654		4.9164		72.5832		4.9739	
584		11680		11.6358		4.8178		23.6661		4.9165		72.5838		4.9740	
585		11700		11.6365		4.8182		23.6667		4.9167		72.5843		4.9740	
586		11720		11.6373		4.8186		23.6673		4.9168		72.5849		4.9741	
587		11740		11.6380		4.8189		23.6679		4.9170		72.5854		4.9741	
588		11760		11.6387		4.8193		23.6685		4.9171		72.5860		4.9742	
589		11780		11.6394		4.8197		23.6691		4.9173		72.5865		4.9742	
590		11800		11.6402		4.8200		23.6697		4.9174		72.5871		4.9742	
591		11820		11.6409		4.8204		23.6703		4.9176		72.5876		4.9743	
592		11840		11.6416		4.8207		23.6709		4.9177		72.5881		4.9743	
593		11860		11.6423		4.8211		23.6715		4.9179		72.5887		4.9744	
594		11880		11.6430		4.8215		23.6721		4.9180		72.5892		4.9744	
595		11900		11.6437		4.8218		23.6727		4.9182		72.5898		4.9745	
596		11920		11.6444		4.8222		23.6733		4.9183		72.5903		4.9745	
597		11940		11.6451		4.8225		23.6739		4.9185		72.5908		4.9746	
598		11960		11.6458		4.8229		23.6745		4.9186		72.5914		4.9746	
599		11980		11.6465		4.8232		23.6751		4.9188		72.5919		4.9746	
600		12000		11.6472		4.8236		23.6757		4.9189		72.5924		4.9747	
601		12020		11.6479		4.8239		23.6763		4.9191		72.5929		4.9747	
602		12040		11.6486		4.8242		23.6768		4.9192		72.5935		4.9748	
603		12060		11.6493		4.8246		23.6774		4.9194		72.5940		4.9748	
604		12080		11.6499		4.8249		23.6780		4.9195		72.5945		4.9749	
605		12100		11.6506		4.8253		23.6786		4.9196		72.5950		4.9749	
606		12120		11.6513		4.8256		23.6791		4.9198		72.5955		4.9749	
607		12140		11.6520		4.8259		23.6797		4.9199		72.5960		4.9750	
608		12160		11.6526		4.8263		23.6803		4.9201		72.5966		4.9750	
609		12180		11.6533		4.8266		23.6809		4.9202		72.5971		4.9751	
610		12200		11.6540		4.8269		23.6814		4.9204		72.5976		4.9751	
611		12220		11.6546		4.8273		23.6820		4.9205		72.5981		4.9752	
612		12240		11.6553		4.8276		23.6825		4.9206		72.5986		4.9752	
613		12260		11.6560		4.8279		23.6831		4.9208		72.5991		4.9752	
614		12280		11.6566		4.8283		23.6837		4.9209		72.5996		4.9753	
615		12300		11.6573		4.8286		23.6842		4.9211		72.6001		4.9753	
616		12320		11.6579		4.8289		23.6848		4.9212		72.6006		4.9754	
617		12340		11.6586		4.8292		23.6853		4.9213		72.6011		4.9754	
618		12360		11.6592		4.8296		23.6859		4.9215		72.6016		4.9754	
619		12380		11.6598		4.8299		23.6864		4.9216		72.6021		4.9755	
620		12400		11.6605		4.8302		23.6870		4.9217		72.6026		4.9755	
621		12420		11.6611		4.8305		23.6875		4.9219		72.6031		4.9756	
622		12440		11.6618		4.8308		23.6880		4.9220		72.6036		4.9756	

623	12460	11.6624	4.8312	23.6886	4.9221	72.6040	4.9756
624	12480	11.6630	4.8315	23.6891	4.9223	72.6045	4.9757
625	12500	11.6637	4.8318	23.6897	4.9224	72.6050	4.9757
626	12520	11.6643	4.8321	23.6902	4.9225	72.6055	4.9758
627	12540	11.6649	4.8324	23.6907	4.9227	72.6060	4.9758
628	12560	11.6655	4.8327	23.6913	4.9228	72.6065	4.9758
629	12580	11.6662	4.8330	23.6918	4.9229	72.6069	4.9759
630	12600	11.6668	4.8333	23.6923	4.9231	72.6074	4.9759
631	12620	11.6674	4.8337	23.6928	4.9232	72.6079	4.9760
632	12640	11.6680	4.8340	23.6934	4.9233	72.6084	4.9760
633	12660	11.6686	4.8343	23.6939	4.9235	72.6088	4.9760
634	12680	11.6692	4.8346	23.6944	4.9236	72.6093	4.9761
635	12700	11.6698	4.8349	23.6949	4.9237	72.6098	4.9761
636	12720	11.6704	4.8352	23.6954	4.9239	72.6102	4.9762
637	12740	11.6710	4.8355	23.6959	4.9240	72.6107	4.9762
638	12760	11.6716	4.8358	23.6965	4.9241	72.6112	4.9762
639	12780	11.6722	4.8361	23.6970	4.9242	72.6116	4.9763
640	12800	11.6728	4.8364	23.6975	4.9244	72.6121	4.9763
641	12820	11.6734	4.8367	23.6980	4.9245	72.6125	4.9763
642	12840	11.6740	4.8370	23.6985	4.9246	72.6130	4.9764
643	12860	11.6746	4.8373	23.6990	4.9247	72.6135	4.9764
644	12880	11.6752	4.8376	23.6995	4.9249	72.6139	4.9765
645	12900	11.6758	4.8379	23.7000	4.9250	72.6144	4.9765
646	12920	11.6763	4.8381	23.7005	4.9251	72.6148	4.9765
647	12940	11.6769	4.8384	23.7010	4.9252	72.6153	4.9766
648	12960	11.6775	4.8387	23.7015	4.9254	72.6157	4.9766
649	12980	11.6781	4.8390	23.7020	4.9255	72.6162	4.9766
650	13000	11.6787	4.8393	23.7025	4.9256	72.6166	4.9767
651	13020	11.6792	4.8396	23.7030	4.9257	72.6171	4.9767
652	13040	11.6798	4.8399	23.7035	4.9259	72.6175	4.9767
653	13060	11.6804	4.8402	23.7039	4.9260	72.6180	4.9768
654	13080	11.6809	4.8404	23.7044	4.9261	72.6184	4.9768
655	13100	11.6815	4.8407	23.7049	4.9262	72.6188	4.9769
656	13120	11.6821	4.8410	23.7054	4.9264	72.6193	4.9769
657	13140	11.6826	4.8413	23.7059	4.9265	72.6197	4.9769
658	13160	11.6832	4.8416	23.7064	4.9266	72.6201	4.9770
659	13180	11.6837	4.8418	23.7068	4.9267	72.6206	4.9770
660	13200	11.6843	4.8421	23.7073	4.9268	72.6210	4.9770
661	13220	11.6848	4.8424	23.7078	4.9269	72.6214	4.9771
662	13240	11.6854	4.8427	23.7083	4.9271	72.6219	4.9771
663	13260	11.6859	4.8429	23.7087	4.9272	72.6223	4.9771
664	13280	11.6865	4.8432	23.7092	4.9273	72.6227	4.9772
665	13300	11.6870	4.8435	23.7097	4.9274	72.6232	4.9772
666	13320	11.6876	4.8438	23.7101	4.9275	72.6236	4.9772
667	13340	11.6881	4.8440	23.7106	4.9277	72.6240	4.9773
668	13360	11.6887	4.8443	23.7111	4.9278	72.6244	4.9773
669	13380	11.6892	4.8446	23.7115	4.9279	72.6248	4.9774
670	13400	11.6897	4.8448	23.7120	4.9280	72.6253	4.9774
671	13420	11.6903	4.8451	23.7125	4.9281	72.6257	4.9774
672	13440	11.6908	4.8454	23.7129	4.9282	72.6261	4.9775
673	13460	11.6913	4.8456	23.7134	4.9283	72.6265	4.9775
674	13480	11.6918	4.8459	23.7138	4.9285	72.6269	4.9775

675		13500		11.6924		4.8462		23.7143		4.9286		72.6273		4.9776	
676		13520		11.6929		4.8464		23.7147		4.9287		72.6278		4.9776	
677		13540		11.6934		4.8467		23.7152		4.9288		72.6282		4.9776	
678		13560		11.6939		4.8469		23.7156		4.9289		72.6286		4.9777	
679		13580		11.6945		4.8472		23.7161		4.9290		72.6290		4.9777	
680		13600		11.6950		4.8475		23.7165		4.9291		72.6294		4.9777	
681		13620		11.6955		4.8477		23.7170		4.9292		72.6298		4.9778	
682		13640		11.6960		4.8480		23.7174		4.9294		72.6302		4.9778	
683		13660		11.6965		4.8482		23.7179		4.9295		72.6306		4.9778	
684		13680		11.6970		4.8485		23.7183		4.9296		72.6310		4.9779	
685		13700		11.6975		4.8487		23.7188		4.9297		72.6314		4.9779	
686		13720		11.6980		4.8490		23.7192		4.9298		72.6318		4.9779	
687		13740		11.6986		4.8493		23.7196		4.9299		72.6322		4.9780	
688		13760		11.6991		4.8495		23.7201		4.9300		72.6326		4.9780	
689		13780		11.6996		4.8498		23.7205		4.9301		72.6330		4.9780	
690		13800		11.7001		4.8500		23.7209		4.9302		72.6334		4.9781	
691		13820		11.7006		4.8503		23.7214		4.9303		72.6338		4.9781	
692		13840		11.7011		4.8505		23.7218		4.9304		72.6342		4.9781	
693		13860		11.7016		4.8508		23.7222		4.9306		72.6346		4.9782	
694		13880		11.7020		4.8510		23.7227		4.9307		72.6350		4.9782	
695		13900		11.7025		4.8512		23.7231		4.9308		72.6354		4.9782	
696		13920		11.7030		4.8515		23.7235		4.9309		72.6358		4.9783	
697		13940		11.7035		4.8517		23.7239		4.9310		72.6361		4.9783	
698		13960		11.7040		4.8520		23.7244		4.9311		72.6365		4.9783	
699		13980		11.7045		4.8522		23.7248		4.9312		72.6369		4.9783	
700		14000		11.7050		4.8525		23.7252		4.9313		72.6373		4.9784	
701		14020		11.7055		4.8527		23.7256		4.9314		72.6377		4.9784	
702		14040		11.7059		4.8529		23.7260		4.9315		72.6381		4.9784	
703		14060		11.7064		4.8532		23.7264		4.9316		72.6384		4.9785	
704		14080		11.7069		4.8534		23.7269		4.9317		72.6388		4.9785	
705		14100		11.7074		4.8537		23.7273		4.9318		72.6392		4.9785	
706		14120		11.7078		4.8539		23.7277		4.9319		72.6396		4.9786	
707		14140		11.7083		4.8541		23.7281		4.9320		72.6400		4.9786	
708		14160		11.7088		4.8544		23.7285		4.9321		72.6403		4.9786	
709		14180		11.7093		4.8546		23.7289		4.9322		72.6407		4.9787	
710		14200		11.7097		4.8548		23.7293		4.9323		72.6411		4.9787	
711		14220		11.7102		4.8551		23.7297		4.9324		72.6414		4.9787	
712		14240		11.7107		4.8553		23.7301		4.9325		72.6418		4.9788	
713		14260		11.7111		4.8555		23.7305		4.9326		72.6422		4.9788	
714		14280		11.7116		4.8558		23.7309		4.9327		72.6426		4.9788	
715		14300		11.7120		4.8560		23.7313		4.9328		72.6429		4.9788	
716		14320		11.7125		4.8562		23.7317		4.9329		72.6433		4.9789	
717		14340		11.7130		4.8565		23.7321		4.9330		72.6437		4.9789	
718		14360		11.7134		4.8567		23.7325		4.9331		72.6440		4.9789	
719		14380		11.7139		4.8569		23.7329		4.9332		72.6444		4.9790	
720		14400		11.7143		4.8571		23.7333		4.9333		72.6447		4.9790	
721		14420		11.7148		4.8574		23.7337		4.9334		72.6451		4.9790	
722		14440		11.7152		4.8576		23.7341		4.9335		72.6455		4.9791	
723		14460		11.7157		4.8578		23.7345		4.9336		72.6458		4.9791	
724		14480		11.7161		4.8581		23.7349		4.9337		72.6462		4.9791	
725		14500		11.7166		4.8583		23.7353		4.9338		72.6465		4.9791	
726		14520		11.7170		4.8585		23.7357		4.9339		72.6469		4.9792	

727	14540	11.7175	4.8587	23.7361	4.9340	72.6473	4.9792
728	14560	11.7179	4.8589	23.7365	4.9341	72.6476	4.9792
729	14580	11.7184	4.8592	23.7368	4.9342	72.6480	4.9793
730	14600	11.7188	4.8594	23.7372	4.9343	72.6483	4.9793
731	14620	11.7192	4.8596	23.7376	4.9344	72.6487	4.9793
732	14640	11.7197	4.8598	23.7380	4.9345	72.6490	4.9793
733	14660	11.7201	4.8600	23.7384	4.9346	72.6494	4.9794
734	14680	11.7205	4.8603	23.7388	4.9347	72.6497	4.9794
735	14700	11.7210	4.8605	23.7391	4.9348	72.6501	4.9794
736	14720	11.7214	4.8607	23.7395	4.9349	72.6504	4.9795
737	14740	11.7218	4.8609	23.7399	4.9350	72.6508	4.9795
738	14760	11.7223	4.8611	23.7403	4.9351	72.6511	4.9795
739	14780	11.7227	4.8613	23.7406	4.9352	72.6514	4.9795
740	14800	11.7231	4.8615	23.7410	4.9353	72.6518	4.9796
741	14820	11.7235	4.8618	23.7414	4.9353	72.6521	4.9796
742	14840	11.7240	4.8620	23.7418	4.9354	72.6525	4.9796
743	14860	11.7244	4.8622	23.7421	4.9355	72.6528	4.9797
744	14880	11.7248	4.8624	23.7425	4.9356	72.6531	4.9797
745	14900	11.7252	4.8626	23.7429	4.9357	72.6535	4.9797
746	14920	11.7256	4.8628	23.7432	4.9358	72.6538	4.9797
747	14940	11.7261	4.8630	23.7436	4.9359	72.6542	4.9798
748	14960	11.7265	4.8632	23.7440	4.9360	72.6545	4.9798
749	14980	11.7269	4.8634	23.7443	4.9361	72.6548	4.9798
750	15000	11.7273	4.8636	23.7447	4.9362	72.6552	4.9798
751	15020	11.7277	4.8638	23.7450	4.9363	72.6555	4.9799
752	15040	11.7281	4.8641	23.7454	4.9364	72.6558	4.9799
753	15060	11.7285	4.8643	23.7458	4.9364	72.6562	4.9799
754	15080	11.7290	4.8645	23.7461	4.9365	72.6565	4.9800
755	15100	11.7294	4.8647	23.7465	4.9366	72.6568	4.9800
756	15120	11.7298	4.8649	23.7468	4.9367	72.6571	4.9800
757	15140	11.7302	4.8651	23.7472	4.9368	72.6575	4.9800
758	15160	11.7306	4.8653	23.7475	4.9369	72.6578	4.9801
759	15180	11.7310	4.8655	23.7479	4.9370	72.6581	4.9801
760	15200	11.7314	4.8657	23.7483	4.9371	72.6584	4.9801
761	15220	11.7318	4.8659	23.7486	4.9372	72.6588	4.9801
762	15240	11.7322	4.8661	23.7490	4.9372	72.6591	4.9802
763	15260	11.7326	4.8663	23.7493	4.9373	72.6594	4.9802
764	15280	11.7330	4.8665	23.7497	4.9374	72.6597	4.9802
765	15300	11.7334	4.8667	23.7500	4.9375	72.6601	4.9803
766	15320	11.7338	4.8669	23.7503	4.9376	72.6604	4.9803
767	15340	11.7342	4.8671	23.7507	4.9377	72.6607	4.9803
768	15360	11.7345	4.8673	23.7510	4.9378	72.6610	4.9803
769	15380	11.7349	4.8675	23.7514	4.9378	72.6613	4.9804
770	15400	11.7353	4.8677	23.7517	4.9379	72.6616	4.9804
771	15420	11.7357	4.8678	23.7521	4.9380	72.6620	4.9804
772	15440	11.7361	4.8680	23.7524	4.9381	72.6623	4.9804
773	15460	11.7365	4.8682	23.7527	4.9382	72.6626	4.9805
774	15480	11.7369	4.8684	23.7531	4.9383	72.6629	4.9805
775	15500	11.7373	4.8686	23.7534	4.9384	72.6632	4.9805
776	15520	11.7376	4.8688	23.7538	4.9384	72.6635	4.9805
777	15540	11.7380	4.8690	23.7541	4.9385	72.6638	4.9806
778	15560	11.7384	4.8692	23.7544	4.9386	72.6641	4.9806

779		15580		11.7388		4.8694		23.7548		4.9387		72.6645		4.9806	
780		15600		11.7392		4.8696		23.7551		4.9388		72.6648		4.9806	
781		15620		11.7395		4.8698		23.7554		4.9389		72.6651		4.9807	
782		15640		11.7399		4.8699		23.7558		4.9389		72.6654		4.9807	
783		15660		11.7403		4.8701		23.7561		4.9390		72.6657		4.9807	
784		15680		11.7407		4.8703		23.7564		4.9391		72.6660		4.9807	
785		15700		11.7410		4.8705		23.7568		4.9392		72.6663		4.9808	
786		15720		11.7414		4.8707		23.7571		4.9393		72.6666		4.9808	
787		15740		11.7418		4.8709		23.7574		4.9394		72.6669		4.9808	
788		15760		11.7421		4.8711		23.7577		4.9394		72.6672		4.9808	
789		15780		11.7425		4.8712		23.7581		4.9395		72.6675		4.9809	
790		15800		11.7429		4.8714		23.7584		4.9396		72.6678		4.9809	
791		15820		11.7433		4.8716		23.7587		4.9397		72.6681		4.9809	
792		15840		11.7436		4.8718		23.7590		4.9398		72.6684		4.9809	
793		15860		11.7440		4.8720		23.7594		4.9398		72.6687		4.9810	
794		15880		11.7443		4.8722		23.7597		4.9399		72.6690		4.9810	
795		15900		11.7447		4.8723		23.7600		4.9400		72.6693		4.9810	
796		15920		11.7451		4.8725		23.7603		4.9401		72.6696		4.9810	
797		15940		11.7454		4.8727		23.7606		4.9402		72.6699		4.9811	
798		15960		11.7458		4.8729		23.7610		4.9402		72.6702		4.9811	
799		15980		11.7461		4.8731		23.7613		4.9403		72.6705		4.9811	
800		16000		11.7465		4.8732		23.7616		4.9404		72.6708		4.9811	