caseI

p	d	rmin	J	J*
1	1	1	35.9341	34.2055
1	2	0.5	8.8694	4.61E+08
1	2	0.6	13.2001	1095.74
1	2	0.7	16.0144	358.892
1	2	0.8	21.1948	122.341
1	2	0.9	25.0004	75.9506
1	2	1	27.6111	59.1323
2	1	1	34.3143	34.2055
2	2	0.5	34.3098	33.935
2	2	0.6	34.3098	33.9351
2	2	0.7	34.3098	33.9347
2	2	0.8	34.3099	33.9341
2	2	0.9	34.31	33.9334
2	2	1	34.3101	33.9331
2	3	0.4	8.35535	552.845
2	3	0.5	16.9752	100.509
2	3	0.6	27.6643	45.7511
2	3	0.7	31.4569	37.6764
2	3	0.8	32.4762	36.1418
2	3	0.9	33.4333	34.6481
2	3	1	33.6962	34.3311
3	1	1	34.3019	34.2055
3	2	0.5	34.1738	33.9374
3	2	0.6	34.1738	33.9374
3	2	0.7	34.1739	33.9371
3	2	0.8	34.1739	33.9364
3	2	0.9	34.174	33.9357
3	2	1	34.1742	33.9345
3	3	0.4	22.5835	74.4729
3	3	0.5	28.1666	37.2274
3	3	0.6	32.1355	34.119
3	3	0.7	33.2029	34.2875
3	3	0.8	33.5508	34.2435
3	3	0.9	33.8205	33.8278
3	3	1	33.9315	33.817
3	4	0.3	12.2066	91.411
3	4	0.4	20.1531	62.5016
3	4	0.5	25.6085	40.9145
3	4	0.6	29.7112	34.9124
3	4	0.7	32.1458	33.902
3	4	0.8	33.2923	33.9719
3	4	0.9	33.6872	33.8341
3	4	1	33.8345	33.773
3	5	0.2	3.85675	4.28E+08
3	5	0.3	13.7947	55.0004
3	5	0.4	19.5935	34.6625
3	5	0.5	25.6817	30.5157
3	5	0.6	29.1437	31.9941
3	5	0.7	31.7835	33.7189
3	5	0.8	33.18	33.7734
3	5	0.9	33.6263	33.8124
3	5	1	33.8018	33.7682

caseI

4	1	1	33.9991	34.2055
4	2	0.5	33.936	33.931
4	2	0.6	33.936	33.9312
4	2	0.7	33.936	33.9312
4	2	0.8	33.936	33.9312
4	2	0.9	33.9361	33.9312
4	2	1	33.9362	33.9313
4	3	0.4	20.1246	158.221
4	3	0.5	28.5765	54.8429
4	3	0.6	32.8128	33.6418
4	3	0.7	33.4921	33.8402
4	3	0.8	33.6856	33.8922
4	3	0.9	33.9343	33.8368
4	3	1	33.9351	33.8372
4	4	0.3	16.298	82.1909
4	4	0.4	24.6124	33.4487
4	4	0.5	28.0395	30.6238
4	4	0.6	31.2603	32.4674
4	4	0.7	32.8572	33.4571
4	4	0.8	33.5867	33.6759
4	4	0.9	33.7523	33.7335
4	4	1	33.9344	33.7917
4	5	0.2	5.3298	3.83E+08
4	5	0.3	17.5506	25.2071
4	5	0.4	22.3943	26.1304
4	5	0.5	27.5084	29.7786
4	5	0.6	30.4467	31.526
4	5	0.7	32.5915	32.9671
4	5	0.8	33.4583	33.5501
4	5	0.9	33.7391	33.7092
4	5	1	33.93	33.765
4	6	0.2	10.1254	769.318
4	6	0.3	17.4163	26.3546
4	6	0.4	22.4537	26.1774
4	6	0.5	26.6279	28.4837
4	6	0.6	30.4287	31.2783
4	6	0.7	32.5166	32.8092
4	6	0.8	33.4455	33.5129
4	6	0.9	33.7473	33.7079
4	6	1	33.909	33.7456
5	1	1	34.2055	34.2055
5	2	0.5	33.888	33.9312
5	2	0.6	33.888	33.9312
5	2	0.7	33.888	33.9312
5	2	0.8	33.888	33.9313
5	2	0.9	33.8881	33.9314
5	2	1	33.8882	33.9313
5	3	0.4	25.2722	68.5243
5	3	0.5	30.293	36.4998
5	3	0.6	32.9715	33.3016
5	3	0.7	33.5543	33.6455
5	3	0.8	33.885	33.8371
5	3	0.9	33.8851	33.8371

casel

5	3	1	33.8853	33.8373
5	4	0.3	17.2529	82.3988
5	4	0.4	25.1255	31.2288
5	4	0.5	28.3826	30.5953
5	4	0.6	31.467	32.4028
5	4	0.7	32.9564	33.409
5	4	0.8	33.6256	33.6353
5	4	0.9	33.8844	33.7916
5	4	1	33.8847	33.7917
5	5	0.2	6.18859	3.83E+08
5	5	0.3	18.3336	24.9101
5	5	0.4	22.7938	26.2747
5	5	0.5	27.8756	29.5991
5	5	0.6	30.6499	31.5015
5	5	0.7	32.6586	32.9553
5	5	0.8	33.4707	33.5383
5	5	0.9	33.8736	33.7624
5	5	1	33.8844	33.7661
5	6	0.2	12.0848	130.75
5	6	0.3	18.0891	27.1949
5	6	0.4	22.8603	25.9324
5	6	0.5	26.8964	28.4545
5	6	0.6	30.5961	31.2296
5	6	0.7	32.5882	32.7988
5	6	0.8	33.4616	33.5042
5	6	0.9	33.8512	33.7429
5	6	1	33.8842	33.7503
5	7	0.2	10.937	133.844
5	7	0.3	16.8154	25.1355
5	7	0.4	22.6265	24.5769
5	7	0.5	27.7435	28.7731
5	7	0.6	31.079	31.4578
5	7	0.7	32.8253	32.9387
5	7	0.8	33.5054	33.5308
5	7	0.9	33.8229	33.7305
5	7	1	33.8837	33.7399
5	8	0.2	11.9031	18.3728
5	8	0.3	17.6025	23.1754
5	8	0.4	23.2801	24.8124
5	8	0.5	28.0081	28.921
5	8	0.6	31.2707	31.5632
5	8	0.7	32.8664	32.9619
5	8	0.8	33.5294	33.5459
5	8	0.9	33.8314	33.7263
5	8	1	33.884	33.7326
6	1	1	33.9773	34.2055
6	2	0.5	33.8142	33.9315
6	2	0.6	33.8142	33.9313
6	2	0.7	33.8142	33.9313
6	2	0.8	33.8142	33.9314
6	2	0.9	33.8142	33.9315
6	2	1	33.8143	33.9317
6	3	0.4	27.34	29.5977

casel

6	3	0.5	31.0911	32.0196
6	3	0.6	33.0056	33.2391
6	3	0.7	33.808	33.8329
6	3	0.8	33.8134	33.8371
6	3	0.9	33.8135	33.8373
6	3	1	33.8136	33.8374
6	4	0.3	20.9292	26.5062
6	4	0.4	26.2494	28.9022
6	4	0.5	29.0285	30.3872
6	4	0.6	31.8002	32.2345
6	4	0.7	33.115	33.3022
6	4	0.8	33.8125	33.791
6	4	0.9	33.8134	33.7917
6	4	1	33.8135	33.7917
6	5	0.2	6.12577	3.89E+08
6	5	0.3	19.2118	24.6399
6	5	0.4	23.6537	25.7472
6	5	0.5	28.4463	29.4628
6	5	0.6	30.9388	31.4735
6	5	0.7	32.7586	32.9256
6	5	0.8	33.7962	33.7571
6	5	0.9	33.8133	33.7659
6	5	1	33.8134	33.766
6	6	0.2	12.764	26.0632
6	6	0.3	19.1832	22.1057
6	6	0.4	23.7517	25.3438
6	6	0.5	27.389	28.4084
6	6	0.6	30.8567	31.1854
6	6	0.7	32.6679	32.8005
6	6	0.8	33.462	33.5008
6	6	0.9	33.8131	33.75
6	6	1	33.8134	33.7502
6	7	0.2	11.769	24.0015
6	7	0.3	17.6683	20.7057
6	7	0.4	23.2451	24.3635
6	7	0.5	28.1255	28.7196
6	7	0.6	31.2411	31.4566
6	7	0.7	32.8618	32.9408
6	7	0.8	33.4995	33.5246
6	7	0.9	33.8131	33.7396
6	7	1	33.8134	33.7396
6	8	0.2	12.6009	29.2237
6	8	0.3	18.3809	19.9624
6	8	0.4	23.7867	24.7116
6	8	0.5	28.3623	28.9029
6	8	0.6	31.4191	31.5726
6	8	0.7	32.906	32.9665
6	8	0.8	33.5483	33.5609
6	8	0.9	33.8126	33.7323
6	8	1	33.8133	33.7323
6	9	0.2	12.9773	15.197
6	9	0.3	19.0006	20.4165
6	9	0.4	24.1909	24.9784

6	9	0.5	28.4878	28.9048
6	9	0.6	31.409	31.5242
6	9	0.7	32.88	32.9299
6	9	0.8	33.5624	33.57
6	9	0.9	33.8109	33.7266
6	9	1	33.8132	33.7271
7	1	1	34.0582	34.2055
7	2	0.5	33.7974	33.9315
7	2	0.6	33.7974	33.9313
7	2	0.7	33.7974	33.9313
7	2	0.8	33.7974	33.9314
7	2	0.9	33.7974	33.9315
7	2	1	33.7975	33.9316
7	3	0.4	27.7127	29.6056
7	3	0.5	31.2965	31.9833
7	3	0.6	33.0545	33.2369
7	3	0.7	33.794	33.8371
7	3	0.8	33.7941	33.8373
7	3	0.9	33.7942	33.8374
7	3	1	33.7942	33.8374
7	4	0.3	21.224	26.3991
7	4	0.4	26.3421	28.8962
7	4	0.5	29.0837	30.3813
7	4	0.6	31.8134	32.2337
7	4	0.7	33.1167	33.3012
7	4	0.8	33.7939	33.7916
7	4	0.9	33.794	33.7917
7	4	1	33.7941	33.7918
7	5	0.2	7.88192	1.76E+08
7	5	0.3	19.6133	24.1681
7	5	0.4	23.7218	25.7139
7	5	0.5	28.4741	29.4494
7	5	0.6	30.9578	31.466
7	5	0.7	32.7633	32.9224
7	5	0.8	33.7936	33.7657
7	5	0.9	33.7939	33.766
7	5	1	33.794	33.766
7	6	0.2	13.0708	26.2451
7	6	0.3	19.2752	21.9843
7	6	0.4	23.7728	25.346
7	6	0.5	27.4107	28.4098
7	6	0.6	30.8568	31.1882
7	6	0.7	32.6737	32.8
7	6	0.8	33.7862	33.7461
7	6	0.9	33.7939	33.7501
7	6	1	33.794	33.7501
7	7	0.2	12.2105	21.2419
7	7	0.3	17.7283	20.6119
7	7	0.4	23.2494	24.373
7	7	0.5	28.143	28.7229
7	7	0.6	31.2437	31.4576
7	7	0.7	32.8663	32.941
7	7	0.8	33.7778	33.7334

7	7	0.9	33.7938	33.7397
7	7	1	33.7939	33.7397
7	8	0.2	13.0223	15.7441
7	8	0.3	18.4232	19.924
7	8	0.4	23.8089	24.7118
7	8	0.5	28.3861	28.9031
7	8	0.6	31.4197	31.5723
7	8	0.7	32.9091	32.967
7	8	0.8	33.5522	33.5613
7	8	0.9	33.7937	33.7323
7	8	1	33.794	33.7323
7	9	0.2	13.0329	14.979
7	9	0.3	19.0578	20.3586
7	9	0.4	24.2179	24.9789
7	9	0.5	28.5092	28.9063
7	9	0.6	31.4058	31.5242
7	9	0.7	32.8812	32.9294
7	9	0.8	33.5637	33.569
7	9	0.9	33.7937	33.727
7	9	1	33.794	33.7271
7	10	0.1	3.75014	5.08E+08
7	10	0.2	13.0559	14.7726
7	10	0.3	18.9366	20.1066
7	10	0.4	24.1818	24.85
7	10	0.5	28.3438	28.7118
7	10	0.6	31.3252	31.4257
7	10	0.7	32.8432	32.8829
7	10	0.8	33.5645	33.568
7	10	0.9	33.7937	33.7231
7	10	1	33.7939	33.7231
7	11	0.1	5.65956	4.91E+06
7	11	0.2	13.1461	14.7004
7	11	0.3	19.1734	20.1623
7	11	0.4	24.1577	24.7227
7	11	0.5	28.3595	28.6503
7	11	0.6	31.2844	31.3621
8	3	0.4	27.9314	29.5949
8	4	0.3	21.7223	26.3627
8	4	0.4	26.7789	28.8808
8	5	0.2	9.71726	16.1729
8	5	0.3	19.8931	24.0911
8	5	0.4	23.8165	25.7018
8	6	0.2	14.1913	18.5367
8	6	0.3	19.3876	21.7865
8	6	0.4	23.8156	25.3305
8	7	0.2	12.9141	17.6165
8	7	0.3	17.8057	20.3377
8	7	0.4	23.3041	24.3601
8	8	0.2	13.2573	15.3822
8	8	0.3	18.5345	19.8603
8	8	0.4	23.8903	24.7044
8	9	0.2	13.1613	14.7426
8	9	0.3	19.1866	20.3116

8	9	0.4	24.3269	24.9722
8	10	0.1	3.89051	4.86E+08
8	10	0.2	13.1715	14.5312
8	10	0.3	19.0738	20.0382
8	10	0.4	24.2873	24.8403
9	3	0.4	28.1317	29.5996
9	4	0.3	21.8587	26.2491
9	4	0.4	26.8534	28.8587
9	5	0.2	8.66633	12.4979
9	5	0.3	20.0533	24.0344
9	5	0.4	23.862	25.6711
9	6	0.2	14.3841	18.398
9	6	0.3	19.4123	21.7642
9	6	0.4	23.817	25.3515
9	7	0.2	13.2467	16.7484
9	7	0.3	17.8827	20.2021
9	7	0.4	23.3081	24.3654
9	8	0.2	13.2895	15.349
9	8	0.3	18.5579	19.8473
9	8	0.4	23.8993	24.7051
9	9	0.2	13.1937	14.6626
9	9	0.3	19.2221	20.2659
9	9	0.4	24.3367	24.9752
9	10	0.1	4.43518	4.15E+08
9	10	0.2	13.2162	14.5078
9	10	0.3	19.1071	20.0186
9	10	0.4	24.2979	24.8408
10	3	0.4	28.2862	29.6001
10	4	0.3	22.125	26.0546
10	4	0.4	27.01	28.8428
10	5	0.2	15.9359	18.2309
10	5	0.3	20.2036	24.0035
10	5	0.4	23.9351	25.6552
10	6	0.2	14.6528	18.065
10	6	0.3	19.5569	21.577
10	6	0.4	23.8454	25.3447
10	7	0.2	13.3581	16.3677
10	7	0.3	17.9674	20.129
10	7	0.4	23.3365	24.3694
10	8	0.2	13.397	15.3087
10	8	0.3	18.6163	19.8283
10	8	0.4	23.9348	24.7051
10	9	0.2	13.2501	14.5948
10	9	0.3	19.2914	20.2216
10	9	0.4	24.3752	24.9805
10	10	0.1	4.28564	1.07E+09
10	10	0.2	13.2632	14.48
10	10	0.3	19.1613	19.9795
10	10	0.4	24.3313	24.8399

J/J*
1.05054
1.92E-08
0.0120468
0.0446219
0.173243
0.329167
0.466938
1.00318
1.01104
1.01104
1.01105
1.01107
1.0111
1.01111
0.0151134
0.168893
0.60467
0.834922
0.898578
0.96494
0.981507
1.00282
1.00697
1.00697
1.00698
1.007
1.00702
1.00706
0.303244
0.756609
0.941865
0.968369
0.979771
0.999785
1.00339
0.133535
0.322441
0.625902
0.851022
0.948196
0.979996
0.995659
1.00182
9.01E-09
0.250811
0.565265
0.84159
0.91091
0.942602
0.98243
0.994495
1.001

J/J*

0.993966
1.00015
1.00014
1.00014
1.00014
1.00014
1.00015
0.127193
0.521062
0.975358
0.989714
0.993903
1.00288
1.00289
0.198294
0.735826
0.91561
0.962818
0.98207
0.99735
1.00056
1.00422
1.39E-08
0.696257
0.85702
0.923763
0.965765
0.988605
0.997265
1.00089
1.00489
0.0131615
0.660843
0.857753
0.934844
0.972838
0.991081
0.997988
1.00117
1.00484
1
0.998727
0.998725
0.998725
0.998725
0.998724
0.998728
0.368806
0.829949
0.990087
0.997289
1.00141
1.00142

1.00142
0.209383
0.804563
0.927679
0.971121
0.986451
0.999714
1.00275
1.00275
1.61E-08
0.735989
0.86752
0.941773
0.972968
0.990995
0.997987
1.00329
1.0035
0.092427
0.665165
0.881536
0.945245
0.979712
0.993578
0.998727
1.00321
1.00397
0.0817146
0.668991
0.92064
0.964219
0.987958
0.996556
0.999242
1.00274
1.00426
0.647866
0.759533
0.938246
0.968436
0.990732
0.997101
0.99951
1.00312
1.00449
0.993328
0.996545
0.996549
0.996548
0.996547
0.996545
0.996538
0.92372

0.971
0.992976
0.999266
0.999297
0.999296
0.999295
0.789595
0.908214
0.955286
0.986527
0.994378
1.00064
1.00064
1.00065
1.57E-08
0.779701
0.91869
0.965499
0.983012
0.994928
1.00116
1.0014
1.0014
0.489733
0.867792
0.937181
0.964114
0.989458
0.995958
0.998842
1.00187
1.00187
0.490346
0.853306
0.954093
0.979315
0.99315
0.997602
0.999251
1.00218
1.00219
0.431187
0.920775
0.962574
0.981297
0.995139
0.998166
0.999625
1.00238
1.0024
0.853941
0.930651
0.968471

0.985572
0.996345
0.998486
0.999775
1.0025
1.00255
0.995695
0.99605
0.996053
0.996053
0.996051
0.996049
0.996049
0.936061
0.978526
0.994511
0.998726
0.998724
0.998723
0.998722
0.803967
0.911611
0.957289
0.986961
0.994463
1.00007
1.00007
1.00007
4.49E-08
0.811535
0.92253
0.966883
0.98385
0.995168
1.00082
1.00083
1.00083
0.49803
0.876771
0.937933
0.964832
0.989375
0.99615
1.00119
1.0013
1.0013
0.57483
0.860101
0.953904
0.979809
0.9932
0.997733
1.00131

1.0016
1.00161
0.827124
0.924669
0.963463
0.982112
0.995167
0.998245
0.999729
1.00182
1.00183
0.870075
0.936106
0.969536
0.986263
0.996245
0.998536
0.999842
1.00198
1.00198
7.38E-09
0.883793
0.941811
0.973111
0.987183
0.996804
0.998793
0.999897
1.00209
1.0021
1.15E-06
0.894263
0.950953
0.977147
0.989852
0.997524
0.94379
0.82398
0.927219
0.600834
0.825742
0.926646
0.765581
0.889892
0.940193
0.733065
0.875505
0.956654
0.861854
0.933243
0.967047
0.892735
0.944611

0.974157
8.01E-09
0.906429
0.951872
0.977738
0.950406
0.832741
0.930513
0.693421
0.834359
0.929528
0.78183
0.891937
0.939471
0.790924
0.885191
0.956606
0.865824
0.935033
0.967383
0.899825
0.948495
0.974432
1.07E-08
0.910972
0.95447
0.978148
0.955613
0.84918
0.936456
0.874115
0.841696
0.932953
0.811117
0.906376
0.940845
0.816127
0.892615
0.957615
0.875126
0.938874
0.968821
0.907867
0.953997
0.975773
3.99E-09
0.91597
0.959051
0.979525

caseII

p	d	rmin	J	J*	J/J*
2	1	1	59.458	69.2724	0.858321
2	2	0.5	55.964	64.9694	0.86139
2	2	0.6	55.9659	64.3707	0.869431
2	2	0.7	55.9714	63.6059	0.879971
2	2	0.8	55.9827	62.8173	0.8912
2	2	0.9	56.0037	62.0192	0.903006
2	2	1	56.0338	61.3388	0.913514
2	3	0.4	22.2551	532.975	0.0417564
2	3	0.5	37.6524	118.52	0.317688
2	3	0.6	50.0938	67.1326	0.746192
2	3	0.7	54.3713	59.1582	0.919083
2	3	0.8	55.6804	57.7637	0.963934
2	3	0.9	55.7952	56.4711	0.988031
2	3	1	56.0778	55.8726	1.00367
3	1	1	60.1105	69.2724	0.867741
3	2	0.5	57.6525	57.5135	1.00242
3	2	0.6	57.6528	57.5086	1.00251
3	2	0.7	57.6538	57.5039	1.00261
3	2	0.8	57.6558	57.5008	1.0027
3	2	0.9	57.6567	57.4977	1.00277
3	2	1	57.6567	57.4954	1.00281
3	3	0.4	38.4406	253.001	0.151939
3	3	0.5	49.7914	81.6971	0.609464
3	3	0.6	53.9413	60.5047	0.891522
3	3	0.7	55.5799	55.9145	0.994016
3	3	0.8	56.2032	54.9953	1.02196
3	3	0.9	56.2319	54.9785	1.0228
3	3	1	56.3422	54.9342	1.02563
3	4	0.3	24.3113	479.366	0.0507155
3	4	0.4	43.8075	72.8971	0.60095
3	4	0.5	53.2879	63.3341	0.841379
3	4	0.6	55.2517	57.1509	0.966768
3	4	0.7	55.6626	54.9342	1.01326
3	4	0.8	56.1838	53.8728	1.0429
3	4	0.9	56.3952	53.674	1.0507
3	4	1	56.4684	53.6796	1.05195
3	5	0.2	7.38468	8.41E+08	8.79E-09
3	5	0.3	27.6064	169.131	0.163225
3	5	0.4	43.6381	70.2178	0.621467
3	5	0.5	51.974	56.6637	0.917236
3	5	0.6	55.3848	55.1039	1.0051
3	5	0.7	55.8743	54.0504	1.03375
3	5	0.8	56.0975	53.4147	1.05022
3	5	0.9	56.4123	53.1735	1.06091
3	5	1	56.5181	53.155	1.06327
4	1	1	55.2655	69.2724	0.797799
4	2	0.5	54.4473	57.4879	0.947109
4	2	0.6	54.4476	57.4863	0.94714
4	2	0.7	54.4482	57.4846	0.94718
4	2	0.8	54.449	57.4841	0.947201
4	2	0.9	54.4506	57.4852	0.947211
4	2	1	54.451	57.4864	0.947197

4	3	0.4	32.4511	288.905	0.112325
4	3	0.5	46.0209	96.145	0.478661
4	3	0.6	54.2467	54.6279	0.993022
4	3	0.7	54.2458	54.6239	0.993078
4	3	0.8	54.2413	54.6555	0.992421
4	3	0.9	54.288	54.5187	0.995767
4	3	1	54.309	54.5243	0.996051
4	4	0.3	31.1711	333.728	0.0934027
4	4	0.4	47.207	72.5533	0.650652
4	4	0.5	52.9983	54.5098	0.972271
4	4	0.6	53.2127	54.1803	0.98214
4	4	0.7	53.7665	53.6289	1.00257
4	4	0.8	53.704	53.7062	0.999958
4	4	0.9	53.9447	53.5017	1.00828
4	4	1	54.0161	53.4549	1.0105
4	5	0.2	10.4905	6.39E+08	1.64E-08
4	5	0.3	37.4417	104.203	0.359316
4	5	0.4	50.2237	64.4517	0.779245
4	5	0.5	52.923	55.8893	0.946924
4	5	0.6	53.5076	53.1409	1.0069
4	5	0.7	53.8282	52.9737	1.01613
4	5	0.8	53.9821	52.9641	1.01922
4	5	0.9	53.9831	52.9461	1.01959
4	5	1	54.0435	52.9336	1.02097
4	6	0.2	16.818	1694.85	0.00992302
4	6	0.3	42.3047	101.451	0.416996
4	6	0.4	51.9873	55.2013	0.941777
4	6	0.5	53.3114	53.477	0.996904
4	6	0.6	53.5832	52.9386	1.01218
4	6	0.7	53.7006	52.7817	1.01741
4	6	0.8	54.0002	52.6825	1.02501
4	6	0.9	53.9606	52.7024	1.02388
4	6	1	54.0492	52.6728	1.02613
5	1	1	69.2724	69.2724	1
5	2	0.5	53.9634	57.5163	0.938228
5	2	0.6	53.9636	57.5189	0.938188
5	2	0.7	53.9634	57.5184	0.938194
5	2	0.8	53.9635	57.5204	0.938162
5	2	0.9	53.9635	57.5227	0.938126
5	2	1	53.9637	57.526	0.938075
5	3	0.4	53.8512	54.4778	0.988499
5	3	0.5	53.8523	54.4729	0.988606
5	3	0.6	53.8551	54.4689	0.988732
5	3	0.7	53.8658	54.4729	0.988855
5	3	0.8	53.8814	54.4899	0.988833
5	3	0.9	53.8797	54.4864	0.988864
5	3	1	53.8897	54.4984	0.988832
5	4	0.3	34.9334	332.447	0.10508
5	4	0.4	49.4864	72.6001	0.681631
5	4	0.5	53.4755	53.8434	0.993167
5	4	0.6	53.4107	54.0967	0.987319
5	4	0.7	53.7514	53.403	1.00652
5	4	0.8	53.7692	53.3618	1.00764

5	4	0.9	53.8065	53.3602	1.00836
5	4	1	53.8103	53.3639	1.00837
5	5	0.2	15.3351	4.70E+08	3.26E-08
5	5	0.3	42.6137	79.8437	0.533714
5	5	0.4	52.7618	56.7253	0.930129
5	5	0.5	53.1544	53.573	0.992185
5	5	0.6	53.2836	53.2384	1.00085
5	5	0.7	53.5308	52.9626	1.01073
5	5	0.8	53.6945	52.8759	1.01548
5	5	0.9	53.6863	52.8544	1.01574
5	5	1	53.7576	52.8505	1.01716
5	6	0.2	20.9518	481.955	0.0434725
5	6	0.3	48.9406	66.2291	0.738959
5	6	0.4	52.4127	54.2295	0.966498
5	6	0.5	53.0649	53.0483	1.00031
5	6	0.6	53.4593	52.6798	1.0148
5	6	0.7	53.5267	52.692	1.01584
5	6	0.8	53.6515	52.6068	1.01986
5	6	0.9	53.6994	52.5924	1.02105
5	6	1	53.7143	52.5837	1.0215
5	7	0.2	22.0105	256.142	0.0859309
5	7	0.3	44.8875	89.5961	0.500998
5	7	0.4	52.6709	54.001	0.975371
5	7	0.5	53.3698	52.5597	1.01541
5	7	0.6	53.3777	52.5666	1.01543
5	7	0.7	53.5428	52.5196	1.01948
5	7	0.8	53.6397	52.4542	1.0226
5	7	0.9	53.7162	52.4374	1.02439
5	7	1	53.7181	52.429	1.02459
5	8	0.2	27.3248	143.719	0.190126
5	8	0.3	47.7963	71.5973	0.667572
5	8	0.4	52.8181	53.0722	0.995212
5	8	0.5	53.285	52.5062	1.01483
5	8	0.6	53.4175	52.4475	1.01849
5	8	0.7	53.5535	52.4044	1.02193
5	8	0.8	53.6206	52.3556	1.02416
5	8	0.9	53.7196	52.3384	1.02639
5	8	1	53.7193	52.3283	1.02658
6	1	1	57.1753	69.2724	0.825369
6	2	0.5	53.0719	57.5967	0.92144
6	2	0.6	53.0721	57.6011	0.921372
6	2	0.7	53.0721	57.6021	0.921358
6	2	0.8	53.0721	57.6053	0.921306
6	2	0.9	53.0722	57.6102	0.92123
6	2	1	53.0724	57.614	0.921171
6	3	0.4	53.0133	54.4923	0.972858
6	3	0.5	53.0142	54.4933	0.972857
6	3	0.6	53.0163	54.4964	0.97284
6	3	0.7	53.0235	54.5093	0.972742
6	3	0.8	53.0331	54.5274	0.972594
6	3	0.9	53.0354	54.5311	0.972571
6	3	1	53.0414	54.541	0.972505
6	4	0.3	52.9729	53.3562	0.992818

6	4	0.4	52.9762	53.3474	0.99304
6	4	0.5	52.9956	53.3619	0.993136
6	4	0.6	52.9974	53.3636	0.993137
6	4	0.7	53.0093	53.3797	0.993062
6	4	0.8	53.0125	53.3824	0.99307
6	4	0.9	53.0176	53.3885	0.993052
6	4	1	53.0268	53.3996	0.993018
6	5	0.2	7.95853	7.75E+08	1.03E-08
6	5	0.3	40.2385	81.6077	0.493073
6	5	0.4	52.9336	52.8446	1.00168
6	5	0.5	52.9379	52.8318	1.00201
6	5	0.6	52.9638	52.8384	1.00237
6	5	0.7	52.9776	52.8386	1.00263
6	5	0.8	52.9974	52.8513	1.00276
6	5	0.9	52.9944	52.8483	1.00276
6	5	1	53.0098	52.8588	1.00286
6	6	0.2	22.9007	250.671	0.0913577
6	6	0.3	49.5363	64.1305	0.77243
6	6	0.4	52.0868	53.9157	0.966078
6	6	0.5	52.4678	53.0564	0.988906
6	6	0.6	52.8887	52.5581	1.00629
6	6	0.7	52.9524	52.5604	1.00746
6	6	0.8	52.9822	52.5624	1.00799
6	6	0.9	52.9889	52.564	1.00808
6	6	1	52.9882	52.5616	1.00812
6	7	0.2	29.9001	163.073	0.183354
6	7	0.3	47.4901	67.1889	0.706815
6	7	0.4	52.3053	53.2094	0.98301
6	7	0.5	52.7815	52.441	1.00649
6	7	0.6	52.7927	52.4426	1.00667
6	7	0.7	52.9332	52.3974	1.01023
6	7	0.8	52.9605	52.3891	1.01091
6	7	0.9	52.9773	52.3917	1.01118
6	7	1	52.9852	52.3903	1.01135
6	8	0.2	31.2937	134.215	0.233161
6	8	0.3	48.3945	68.3462	0.708078
6	8	0.4	52.2874	52.897	0.988477
6	8	0.5	52.7614	52.3416	1.00802
6	8	0.6	52.8212	52.3103	1.00977
6	8	0.7	52.921	52.2904	1.01206
6	8	0.8	52.9504	52.2818	1.01279
6	8	0.9	52.9749	52.2824	1.01325
6	8	1	52.9797	52.2789	1.01341
6	9	0.2	34.3273	136.447	0.25158
6	9	0.3	51.1309	57.3107	0.89217
6	9	0.4	52.759	52.2693	1.00937
6	9	0.5	52.7979	52.2489	1.01051
7	2	0.5	52.9158	57.6552	0.917797
7	3	0.4	52.8387	54.5195	0.969171
7	3	0.5	52.8399	54.5254	0.969088
7	4	0.3	52.7928	53.3572	0.989423
7	4	0.4	52.7963	53.3515	0.989592
7	4	0.5	52.8105	53.361	0.989682

7	5	0.2	23.6515	3.46E+08	6.84E-08
7	5	0.3	52.7602	52.8419	0.998455
7	5	0.4	52.7796	52.8243	0.999155
7	5	0.5	52.7831	52.8217	0.99927
7	6	0.2	24.4677	256.003	0.0955762
7	6	0.3	52.7369	52.5514	1.00353
7	6	0.4	52.7463	52.5406	1.00392
7	6	0.5	52.7587	52.5416	1.00413
7	7	0.2	31.5783	121.525	0.259851
7	7	0.3	51.1603	55.3614	0.924114
7	7	0.4	52.1698	53.1091	0.982313
7	7	0.5	52.7452	52.3789	1.00699
7	8	0.2	38.4315	119.026	0.322884
7	8	0.3	51.1683	55.7096	0.918483
7	8	0.4	52.2303	52.7961	0.989284
7	8	0.5	52.6503	52.3001	1.0067
7	9	0.2	39.27	104.811	0.374674
7	9	0.3	51.9517	54.2414	0.957786
7	9	0.4	52.6324	52.2352	1.0076
7	9	0.5	52.7192	52.2117	1.00972
7	10	0.1	5.81862	7.71E+08	7.55E-09
7	10	0.2	36.2899	135.657	0.267513
7	10	0.3	52.1346	52.861	0.986257
7	10	0.4	52.6195	52.1885	1.00826
7	10	0.5	52.6651	52.1666	1.00956
8	2	0.5	52.5406	57.6935	0.910684
8	3	0.4	52.5156	54.5612	0.962509
8	3	0.5	52.5163	54.5681	0.962401
8	4	0.3	52.4919	53.3674	0.983595
8	4	0.4	52.493	53.37	0.983567
8	4	0.5	52.4998	53.3863	0.983394
8	5	0.2	31.7568	1148.85	0.0276421
8	5	0.3	52.4677	52.8226	0.993281
8	5	0.4	52.4814	52.8247	0.993502
8	5	0.5	52.4846	52.828	0.993499
8	6	0.2	33.0459	268.728	0.122972
8	6	0.3	52.4577	52.5285	0.998651
8	6	0.4	52.4681	52.5311	0.998802
8	6	0.5	52.4726	52.5322	0.998866
8	7	0.2	34.8652	106.179	0.328361
8	7	0.3	52.4441	52.3608	1.00159
8	7	0.4	52.4524	52.3563	1.00184
8	7	0.5	52.4654	52.3596	1.00202
8	8	0.2	44.7119	72.2357	0.618973
8	8	0.3	52.43	52.2532	1.00338
8	8	0.4	52.4266	52.251	1.00336
8	8	0.5	52.4569	52.2496	1.00397
8	9	0.2	45.3203	70.5444	0.642437
8	9	0.3	52.4153	52.1814	1.00448
8	9	0.4	52.4296	52.1755	1.00487
8	9	0.5	52.4547	52.1767	1.00533
8	10	0.1	6.34472	8.03E+08	7.91E-09
8	10	0.2	43.9686	80.5025	0.546176

caseII

8	10	0.3	51.9139	52.6927	0.98522
8	10	0.4	52.4049	52.1304	1.00527
8	10	0.5	52.4482	52.1258	1.00618
9	2	0.5	52.4838	57.7093	0.909451
9	3	0.4	52.4269	54.5836	0.960489
9	3	0.5	52.4276	54.5911	0.960369
9	4	0.3	52.4103	53.3844	0.981753
9	4	0.4	52.4114	53.3893	0.981683
9	4	0.5	52.4158	53.404	0.981495
9	5	0.2	52.3912	52.8253	0.991783
9	5	0.3	52.3924	52.8229	0.99185
9	5	0.4	52.3978	52.8313	0.991794
9	5	0.5	52.4007	52.8352	0.991776
9	6	0.2	35.1758	271.712	0.12946
9	6	0.3	52.3811	52.525	0.997259
9	6	0.4	52.3901	52.5324	0.997291
9	6	0.5	52.3915	52.5347	0.997276
9	7	0.2	39.0253	111.183	0.351002
9	7	0.3	52.3718	52.3525	1.00037
9	7	0.4	52.3802	52.3534	1.00051
9	7	0.5	52.3873	52.3577	1.00057
9	8	0.2	52.344	52.2611	1.00159
9	8	0.3	52.3615	52.242	1.00229
9	8	0.4	52.3708	52.2406	1.00249
9	8	0.5	52.3813	52.2443	1.00262
9	9	0.2	52.3376	52.1839	1.00295
9	9	0.3	52.3513	52.1684	1.00351
9	9	0.4	52.364	52.1653	1.00381
9	9	0.5	52.3795	52.1693	1.00403
9	10	0.1	6.76464	-8.76E+08	-7.72E-09
9	10	0.2	48.3536	59.1838	0.817007
9	10	0.3	52.336	52.121	1.00413
9	10	0.4	52.3574	52.1134	1.00468
9	10	0.5	52.375	52.116	1.00497
10	2	0.5	52.2869	57.7317	0.905689
10	3	0.4	52.269	54.6104	0.957126
10	3	0.5	52.2695	54.6176	0.957008
10	4	0.3	52.2601	53.4068	0.978529
10	4	0.4	52.2608	53.4115	0.978456
10	4	0.5	52.2636	53.4251	0.978259
10	5	0.2	52.2494	52.8319	0.988973
10	5	0.3	52.2499	52.8372	0.988884
10	5	0.4	52.2526	52.846	0.98877
10	5	0.5	52.2556	52.8543	0.988673
10	6	0.2	52.2375	52.5283	0.994463
10	6	0.3	52.2405	52.5307	0.994475
10	6	0.4	52.2467	52.5391	0.994433
10	6	0.5	52.2502	52.546	0.994372
10	7	0.2	42.0902	101.06	0.416489
10	7	0.3	52.236	52.3517	0.997792
10	7	0.4	52.2413	52.3564	0.997801
10	7	0.5	52.2457	52.3614	0.99779
10	8	0.2	52.2172	52.2379	0.999605

caseII

10	8	0.3	52.2303	52.2361	0.999888
10	8	0.4	52.2375	52.2403	0.999945
10	8	0.5	52.242	52.2435	0.99997
10	9	0.2	52.2125	52.1617	1.00097
10	9	0.3	52.2244	52.1587	1.00126
10	9	0.4	52.2327	52.1609	1.00138
10	9	0.5	52.2408	52.1651	1.00145
10	10	0.1	7.40488	7.48E+08	9.90E-09
10	10	0.2	52.2054	52.1132	1.00177
10	10	0.3	52.2162	52.105	1.00213
10	10	0.4	52.2283	52.1055	1.00236
10	10	0.5	52.2383	52.1088	1.00249

p	d	rmin	J	J*	J/J*
2	2	0.5	53.5881	1.14E+09	4.70E-08
2	2	0.6	107.062	235.138	0.455316
2	2	0.7	118.839	125.89	0.943991
2	2	0.8	122.526	112.086	1.09315
2	2	0.9	124.264	107.813	1.15258
2	2	1	125.255	106.026	1.18136
2	3	0.4	59.0007	149.159	0.395556
2	3	0.5	82.2338	138.45	0.593961
2	3	0.6	104.445	106.352	0.982072
2	3	0.7	114.791	101.457	1.13142
2	3	0.8	118.694	100.448	1.18165
2	3	0.9	121.697	99.8637	1.21863
2	3	1	123.091	99.7639	1.23383
3	2	0.5	104.025	104.867	0.991967
3	2	0.6	104.025	104.842	0.992209
3	2	0.7	104.025	104.798	0.99263
3	2	0.8	104.027	104.76	0.993001
3	2	0.9	104.029	104.723	0.993365
3	2	1	104.034	104.659	0.994025
3	3	0.4	82.0728	163.859	0.500875
3	3	0.5	91.4746	102.645	0.891176
3	3	0.6	96.7114	100.861	0.958855
3	3	0.7	99.6318	101.139	0.985098
3	3	0.8	100.888	100.378	1.00508
3	3	0.9	102.23	99.713	1.02524
3	3	1	102.896	99.5146	1.03398
3	4	0.3	43.5799	958.591	0.0454625
3	4	0.4	85.2404	132.954	0.641127
3	4	0.5	94.2861	102.165	0.922884
3	4	0.6	96.2608	100.65	0.956396
3	4	0.7	98.8387	98.9872	0.998499
3	4	0.8	101.041	98.6484	1.02426
3	4	0.9	102.018	98.1203	1.03972
3	4	1	102.61	98.01	1.04693
3	5	0.2	12.1535	9.14E+08	1.33E-08
3	5	0.3	55.8079	571.238	0.0976964
3	5	0.4	83.1664	130.381	0.637871
3	5	0.5	94.9269	103.676	0.915608
3	5	0.6	97.7532	100.276	0.974845
3	5	0.7	99.4143	98.6304	1.00795
3	5	0.8	101.263	98.2473	1.03069
3	5	0.9	102.322	97.7177	1.04712
3	5	1	102.954	97.5106	1.05583
4	2	0.5	99.4023	104.657	0.949795
4	2	0.6	99.4024	104.663	0.94974
4	2	0.7	99.4029	104.676	0.949624
4	2	0.8	99.4034	104.687	0.949531
4	2	0.9	99.4041	104.697	0.949445
4	2	1	99.4054	104.713	0.94931
4	3	0.4	91.5653	98.8056	0.926721
4	3	0.5	94.606	102.7	0.921191
4	3	0.6	96.8786	100.345	0.965459

4	3	0.7	98.1073	99.7093	0.983934
4	3	0.8	98.5698	99.4898	0.990752
4	3	0.9	98.8225	99.3053	0.995138
4	3	1	98.986	99.3012	0.996825
4	4	0.3	54.573	496.92	0.109823
4	4	0.4	85.7719	115.713	0.74125
4	4	0.5	96.9199	100.761	0.961874
4	4	0.6	96.6742	100.161	0.965184
4	4	0.7	97.5861	98.4313	0.991413
4	4	0.8	98.266	97.9829	1.00289
4	4	0.9	98.4608	97.9015	1.00571
4	4	1	98.7476	97.887	1.00879
4	5	0.2	16.8085	1.34E+09	1.26E-08
4	5	0.3	60.8167	187.468	0.324412
4	5	0.4	87.9017	111.315	0.789663
4	5	0.5	95.8893	98.6971	0.971552
4	5	0.6	97.5153	98.7004	0.987993
4	5	0.7	98.0207	97.8929	1.00131
4	5	0.8	98.3793	97.5257	1.00875
4	5	0.9	98.672	97.3955	1.01311
4	5	1	98.8792	97.3595	1.01561
4	6	0.2	29.6661	725.159	0.0409097
4	6	0.3	69.2795	231.177	0.299682
4	6	0.4	91.0672	101.32	0.898804
4	6	0.5	96.7746	98.0249	0.987245
4	6	0.6	97.6632	97.7049	0.999573
4	6	0.7	98.0159	97.5616	1.00466
4	6	0.8	98.4717	97.2929	1.01212
4	6	0.9	98.7262	97.1466	1.01626
4	6	1	98.8868	97.0775	1.01864
5	2	0.5	98.6878	105.126	0.93876
5	2	0.6	98.6878	105.136	0.938666
5	2	0.7	98.6882	105.163	0.93843
5	2	0.8	98.6888	105.184	0.938248
5	2	0.9	98.6895	105.204	0.93808
5	2	1	98.6905	105.225	0.937899
5	3	0.4	93.6304	97.1215	0.964055
5	3	0.5	97.3233	99.8436	0.974758
5	3	0.6	98.0345	99.3721	0.98654
5	3	0.7	98.2529	99.2367	0.990086
5	3	0.8	98.3476	99.2727	0.990681
5	3	0.9	98.3738	99.2926	0.990747
5	3	1	98.3951	99.3124	0.990764
5	4	0.3	58.9923	443.867	0.132905
5	4	0.4	87.9516	114.815	0.76603
5	4	0.5	97.3332	100.658	0.966966
5	4	0.6	97.8045	98.7198	0.990728
5	4	0.7	97.8315	98.2769	0.995468
5	4	0.8	98.0397	97.9371	1.00105
5	4	0.9	98.1541	97.8969	1.00263
5	4	1	98.2919	97.8918	1.00409
5	5	0.2	32.9697	5.45E+08	6.05E-08
5	5	0.3	76.2219	126.787	0.601183

5	5	0.4	90.4735	106.185	0.852038
5	5	0.5	96.0963	98.72	0.973423
5	5	0.6	97.3116	98.2532	0.990417
5	5	0.7	97.7077	97.5792	1.00132
5	5	0.8	98.0277	97.3859	1.00659
5	5	0.9	98.1865	97.3453	1.00864
5	5	1	98.2959	97.3393	1.00983
5	6	0.2	42.9702	688.009	0.0624558
5	6	0.3	78.7495	183.983	0.428026
5	6	0.4	92.4194	102.25	0.903861
5	6	0.5	96.7108	97.6441	0.990442
5	6	0.6	97.5019	97.4229	1.00081
5	6	0.7	97.542	97.3408	1.00207
5	6	0.8	97.9931	97.1227	1.00896
5	6	0.9	98.199	97.0763	1.01156
5	6	1	98.3043	97.0493	1.01293
5	7	0.2	41.2307	583.701	0.0706366
5	7	0.3	80.7437	303.21	0.266296
5	7	0.4	94.3552	99.82	0.945253
5	7	0.5	97.2017	97.4801	0.997145
5	7	0.6	97.4755	97.1656	1.00319
5	7	0.7	97.7209	97.1578	1.0058
5	7	0.8	97.9971	96.9798	1.01049
5	7	0.9	98.1716	96.9281	1.01283
5	7	1	98.3001	96.8824	1.01463
5	8	0.2	56.2715	282.772	0.198999
5	8	0.3	87.8327	113.651	0.772825
5	8	0.4	94.594	100.479	0.941433
5	8	0.5	97.3408	97.2826	1.0006
5	8	0.6	97.6594	97.0757	1.00601
5	8	0.7	97.8236	97.0952	1.0075
5	8	0.8	98.0022	96.8871	1.01151
5	8	0.9	98.1613	96.835	1.0137
5	8	1	98.2886	96.7796	1.01559

7	2	0.5	97.4374	105.703	0.921807
7	3	0.4	97.3126	99.3761	0.979235
7	3	0.5	97.3143	99.3997	0.97902
7	4	0.3	85.9479	128.891	0.666829
7	4	0.4	94.5895	100.469	0.941477
7	4	0.5	97.2727	97.9008	0.993585
7	5	0.2	42.631	5.45E+08	7.83E-08
7	5	0.3	86.1136	118.187	0.728619
7	5	0.4	95.1311	101.177	0.940246
7	5	0.5	96.8498	97.8131	0.990151
7	6	0.2	42.9578	319.027	0.134652
7	6	0.3	93.6802	101.731	0.920864
7	6	0.4	96.0832	99.4316	0.966325
7	6	0.5	96.4138	97.3911	0.989966
7	7	0.2	56.846	181.465	0.313261
7	7	0.3	92.0062	107.399	0.856678
7	7	0.4	96.22	97.3832	0.988055
7	7	0.5	96.964	96.9268	1.00038
7	8	0.2	66.8993	167.948	0.398334
7	8	0.3	91.9494	100.755	0.912606
7	8	0.4	96.4497	96.8128	0.99625
7	8	0.5	96.8537	96.8284	1.00026
7	9	0.2	68.2142	196.361	0.347392
7	9	0.3	93.9141	99.6379	0.942554
7	9	0.4	96.6557	96.7957	0.998554
7	9	0.5	96.9838	96.7302	1.00262
7	10	0.1	10.5096	1.47E+09	7.14E-09
7	10	0.2	61.3553	198.249	0.309486
7	10	0.3	93.6041	98.3652	0.951598
7	10	0.4	96.7539	96.6603	1.00097
7	10	0.5	96.9452	96.7	1.00253
8	2	0.5	97.0238	105.88	0.916354
8	3	0.4	96.9825	99.5202	0.974501
8	3	0.5	96.9841	99.5485	0.97424
8	4	0.3	91.4725	114.786	0.796898
8	4	0.4	96.9594	97.9303	0.990085
8	4	0.5	96.9632	97.948	0.989946
8	5	0.2	44.1006	5.45E+08	8.10E-08
8	5	0.3	87.2731	116.901	0.746557
8	5	0.4	95.076	101.118	0.940247
8	5	0.5	96.9604	97.3315	0.996187
8	6	0.2	52.4938	340.784	0.154038
8	6	0.3	94.0429	102.233	0.919885
8	6	0.4	95.9998	99.4169	0.965629
8	6	0.5	96.5632	97.2909	0.99252
8	7	0.2	57.4595	136.085	0.422233
8	7	0.3	92.2111	107.213	0.86007

caseIII

8	7	0.4	96.1976	97.2679	0.988997
8	7	0.5	96.87	96.8221	1.00049
8	8	0.2	69.9747	94.3134	0.741938
8	8	0.3	93.41	99.5267	0.938542
8	8	0.4	96.1124	96.8307	0.992583
8	8	0.5	96.781	96.723	1.0006
8	9	0.2	75.37	103.302	0.729607

p	d	rmin	J	J*	J/J*		p
1	1	1	35.9341	34.2055	1.05054		
1	2	0.5	8.8694	4.61E+08	1.92E-08		
1	2	0.6	13.2001	1095.74	0.0120468		
1	2	0.7	16.0144	358.892	0.0446219		
1	2	0.8	21.1948	122.341	0.173243		
1	2	0.9	25.0004	75.9506	0.329167		
1	2	1	27.6111	59.1323	0.466938		
2	1	1	34.3143	34.2055	1.00318		2
2	2	0.5	34.3098	33.935	1.01104		2
2	2	0.6	34.3098	33.9351	1.01104		2
2	2	0.7	34.3098	33.9347	1.01105		2
2	2	0.8	34.3099	33.9341	1.01107		2
2	2	0.9	34.31	33.9334	1.0111		2
2	2	1	34.3101	33.9331	1.01111		2
2	3	0.4	8.35535	552.845	0.0151134		2
2	3	0.5	16.9752	100.509	0.168893		2
2	3	0.6	27.6643	45.7511	0.60467		2
2	3	0.7	31.4569	37.6764	0.834922		2
2	3	0.8	32.4762	36.1418	0.898578		2
2	3	0.9	33.4333	34.6481	0.96494		2
2	3	1	33.6962	34.3311	0.981507		2
3	1	1	34.3019	34.2055	1.00282		3
3	2	0.5	34.1738	33.9374	1.00697		3
3	2	0.6	34.1738	33.9374	1.00697		3
3	2	0.7	34.1739	33.9371	1.00698		3
3	2	0.8	34.1739	33.9364	1.007		3
3	2	0.9	34.174	33.9357	1.00702		3
3	2	1	34.1742	33.9345	1.00706		3
3	3	0.4	22.5835	74.4729	0.303244		3
3	3	0.5	28.1666	37.2274	0.756609		3
3	3	0.6	32.1355	34.119	0.941865		3
3	3	0.7	33.2029	34.2875	0.968369		3
3	3	0.8	33.5508	34.2435	0.979771		3
3	3	0.9	33.8205	33.8278	0.999785		3
3	3	1	33.9315	33.817	1.00339		3
3	4	0.3	12.2066	91.411	0.133535		3
3	4	0.4	20.1531	62.5016	0.322441		3
3	4	0.5	25.6085	40.9145	0.625902		3
3	4	0.6	29.7112	34.9124	0.851022		3
3	4	0.7	32.1458	33.902	0.948196		3
3	4	0.8	33.2923	33.9719	0.979996		3
3	4	0.9	33.6872	33.8341	0.995659		3
3	4	1	33.8345	33.773	1.00182		3
3	5	0.2	3.85675	4.28E+08	9.01E-09		3
3	5	0.3	13.7947	55.0004	0.250811		3
3	5	0.4	19.5935	34.6625	0.565265		3
3	5	0.5	25.6817	30.5157	0.84159		3
3	5	0.6	29.1437	31.9941	0.91091		3
3	5	0.7	31.7835	33.7189	0.942602		3
3	5	0.8	33.18	33.7734	0.98243		3
3	5	0.9	33.6263	33.8124	0.994495		3

3	5	1	33.8018	33.7682	1.001	3
4	1	1	33.9991	34.2055	0.993966	4
4	2	0.5	33.936	33.931	1.00015	4
4	2	0.6	33.936	33.9312	1.00014	4
4	2	0.7	33.936	33.9312	1.00014	4
4	2	0.8	33.936	33.9312	1.00014	4
4	2	0.9	33.9361	33.9312	1.00014	4
4	2	1	33.9362	33.9313	1.00015	4
4	3	0.4	20.1246	158.221	0.127193	4
4	3	0.5	28.5765	54.8429	0.521062	4
4	3	0.6	32.8128	33.6418	0.975358	4
4	3	0.7	33.4921	33.8402	0.989714	4
4	3	0.8	33.6856	33.8922	0.993903	4
4	3	0.9	33.9343	33.8368	1.00288	4
4	3	1	33.9351	33.8372	1.00289	4
4	4	0.3	16.298	82.1909	0.198294	4
4	4	0.4	24.6124	33.4487	0.735826	4
4	4	0.5	28.0395	30.6238	0.91561	4
4	4	0.6	31.2603	32.4674	0.962818	4
4	4	0.7	32.8572	33.4571	0.98207	4
4	4	0.8	33.5867	33.6759	0.99735	4
4	4	0.9	33.7523	33.7335	1.00056	4
4	4	1	33.9344	33.7917	1.00422	4
4	5	0.2	5.3298	3.83E+08	1.39E-08	4
4	5	0.3	17.5506	25.2071	0.696257	4
4	5	0.4	22.3943	26.1304	0.85702	4
4	5	0.5	27.5084	29.7786	0.923763	4
4	5	0.6	30.4467	31.526	0.965765	4
4	5	0.7	32.5915	32.9671	0.988605	4
4	5	0.8	33.4583	33.5501	0.997265	4
4	5	0.9	33.7391	33.7092	1.00089	4
4	5	1	33.93	33.765	1.00489	4
4	6	0.2	10.1254	769.318	0.0131615	4
4	6	0.3	17.4163	26.3546	0.660843	4
4	6	0.4	22.4537	26.1774	0.857753	4
4	6	0.5	26.6279	28.4837	0.934844	4
4	6	0.6	30.4287	31.2783	0.972838	4
4	6	0.7	32.5166	32.8092	0.991081	4
4	6	0.8	33.4455	33.5129	0.997988	4
4	6	0.9	33.7473	33.7079	1.00117	4
4	6	1	33.909	33.7456	1.00484	4
5	1	1	34.2055	34.2055	1	5
5	2	0.5	33.888	33.9312	0.998727	5
5	2	0.6	33.888	33.9312	0.998725	5
5	2	0.7	33.888	33.9312	0.998725	5
5	2	0.8	33.888	33.9313	0.998725	5
5	2	0.9	33.8881	33.9314	0.998724	5
5	2	1	33.8882	33.9313	0.998728	5
5	3	0.4	25.2722	68.5243	0.368806	5
5	3	0.5	30.293	36.4998	0.829949	5
5	3	0.6	32.9715	33.3016	0.990087	5
5	3	0.7	33.5543	33.6455	0.997289	5
5	3	0.8	33.885	33.8371	1.00141	5

5	3	0.9	33.8851	33.8371	1.00142	5
5	3	1	33.8853	33.8373	1.00142	5
5	4	0.3	17.2529	82.3988	0.209383	5
5	4	0.4	25.1255	31.2288	0.804563	5
5	4	0.5	28.3826	30.5953	0.927679	5
5	4	0.6	31.467	32.4028	0.971121	5
5	4	0.7	32.9564	33.409	0.986451	5
5	4	0.8	33.6256	33.6353	0.999714	5
5	4	0.9	33.8844	33.7916	1.00275	5
5	4	1	33.8847	33.7917	1.00275	5
5	5	0.2	6.18859	3.83E+08	1.61E-08	5
5	5	0.3	18.3336	24.9101	0.735989	5
5	5	0.4	22.7938	26.2747	0.86752	5
5	5	0.5	27.8756	29.5991	0.941773	5
5	5	0.6	30.6499	31.5015	0.972968	5
5	5	0.7	32.6586	32.9553	0.990995	5
5	5	0.8	33.4707	33.5383	0.997987	5
5	5	0.9	33.8736	33.7624	1.00329	5
5	5	1	33.8844	33.7661	1.0035	5
5	6	0.2	12.0848	130.75	0.092427	5
5	6	0.3	18.0891	27.1949	0.665165	5
5	6	0.4	22.8603	25.9324	0.881536	5
5	6	0.5	26.8964	28.4545	0.945245	5
5	6	0.6	30.5961	31.2296	0.979712	5
5	6	0.7	32.5882	32.7988	0.993578	5
5	6	0.8	33.4616	33.5042	0.998727	5
5	6	0.9	33.8512	33.7429	1.00321	5
5	6	1	33.8842	33.7503	1.00397	5
5	7	0.2	10.937	133.844	0.0817146	5
5	7	0.3	16.8154	25.1355	0.668991	5
5	7	0.4	22.6265	24.5769	0.92064	5
5	7	0.5	27.7435	28.7731	0.964219	5
5	7	0.6	31.079	31.4578	0.987958	5
5	7	0.7	32.8253	32.9387	0.996556	5
5	7	0.8	33.5054	33.5308	0.999242	5
5	7	0.9	33.8229	33.7305	1.00274	5
5	7	1	33.8837	33.7399	1.00426	5
5	8	0.2	11.9031	18.3728	0.647866	5
5	8	0.3	17.6025	23.1754	0.759533	5
5	8	0.4	23.2801	24.8124	0.938246	5
5	8	0.5	28.0081	28.921	0.968436	5
5	8	0.6	31.2707	31.5632	0.990732	5
5	8	0.7	32.8664	32.9619	0.997101	5
5	8	0.8	33.5294	33.5459	0.99951	5
5	8	0.9	33.8314	33.7263	1.00312	5
5	8	1	33.884	33.7326	1.00449	5
6	1	1	33.9773	34.2055	0.993328	6
6	2	0.5	33.8142	33.9315	0.996545	6
6	2	0.6	33.8142	33.9313	0.996549	6
6	2	0.7	33.8142	33.9313	0.996548	6
6	2	0.8	33.8142	33.9314	0.996547	6
6	2	0.9	33.8142	33.9315	0.996545	6
6	2	1	33.8143	33.9317	0.996538	6

combined_Cases

6	3	0.4	27.34	29.5977	0.92372		6
6	3	0.5	31.0911	32.0196	0.971		6
6	3	0.6	33.0056	33.2391	0.992976		6
6	3	0.7	33.808	33.8329	0.999266		6
6	3	0.8	33.8134	33.8371	0.999297		6
6	3	0.9	33.8135	33.8373	0.999296		6
6	3	1	33.8136	33.8374	0.999295		6
6	4	0.3	20.9292	26.5062	0.789595		6
6	4	0.4	26.2494	28.9022	0.908214		6
6	4	0.5	29.0285	30.3872	0.955286		6
6	4	0.6	31.8002	32.2345	0.986527		6
6	4	0.7	33.115	33.3022	0.994378		6
6	4	0.8	33.8125	33.791	1.00064		6
6	4	0.9	33.8134	33.7917	1.00064		6
6	4	1	33.8135	33.7917	1.00065		6
6	5	0.2	6.12577	3.89E+08	1.57E-08		6
6	5	0.3	19.2118	24.6399	0.779701		6
6	5	0.4	23.6537	25.7472	0.91869		6
6	5	0.5	28.4463	29.4628	0.965499		6
6	5	0.6	30.9388	31.4735	0.983012		6
6	5	0.7	32.7586	32.9256	0.994928		6
6	5	0.8	33.7962	33.7571	1.00116		6
6	5	0.9	33.8133	33.7659	1.0014		6
6	5	1	33.8134	33.766	1.0014		6
6	6	0.2	12.764	26.0632	0.489733		6
6	6	0.3	19.1832	22.1057	0.867792		6
6	6	0.4	23.7517	25.3438	0.937181		6
6	6	0.5	27.389	28.4084	0.964114		6
6	6	0.6	30.8567	31.1854	0.989458		6
6	6	0.7	32.6679	32.8005	0.995958		6
6	6	0.8	33.462	33.5008	0.998842		6
6	6	0.9	33.8131	33.75	1.00187		6
6	6	1	33.8134	33.7502	1.00187		6
6	7	0.2	11.769	24.0015	0.490346		6
6	7	0.3	17.6683	20.7057	0.853306		6
6	7	0.4	23.2451	24.3635	0.954093		6
6	7	0.5	28.1255	28.7196	0.979315		6
6	7	0.6	31.2411	31.4566	0.99315		6
6	7	0.7	32.8618	32.9408	0.997602		6
6	7	0.8	33.4995	33.5246	0.999251		6
6	7	0.9	33.8131	33.7396	1.00218		6
6	7	1	33.8134	33.7396	1.00219		6
6	8	0.2	12.6009	29.2237	0.431187		6
6	8	0.3	18.3809	19.9624	0.920775		6
6	8	0.4	23.7867	24.7116	0.962574		6
6	8	0.5	28.3623	28.9029	0.981297		6
6	8	0.6	31.4191	31.5726	0.995139		6
6	8	0.7	32.906	32.9665	0.998166		6
6	8	0.8	33.5483	33.5609	0.999625		6
6	8	0.9	33.8126	33.7323	1.00238		6
6	8	1	33.8133	33.7323	1.0024		6
6	9	0.2	12.9773	15.197	0.853941		6
6	9	0.3	19.0006	20.4165	0.930651		6

6	9	0.4	24.1909	24.9784	0.968471	6
6	9	0.5	28.4878	28.9048	0.985572	6
7	2	0.5	33.7974	33.9315	0.99605	7
7	3	0.4	27.7127	29.6056	0.936061	7
7	3	0.5	31.2965	31.9833	0.978526	7
7	4	0.3	21.224	26.3991	0.803967	7
7	4	0.4	26.3421	28.8962	0.911611	7
7	4	0.5	29.0837	30.3813	0.957289	7
7	5	0.2	7.88192	1.76E+08	4.49E-08	7
7	5	0.3	19.6133	24.1681	0.811535	7
7	5	0.4	23.7218	25.7139	0.92253	7
7	5	0.5	28.4741	29.4494	0.966883	7
7	6	0.2	13.0708	26.2451	0.49803	7
7	6	0.3	19.2752	21.9843	0.876771	7
7	6	0.4	23.7728	25.346	0.937933	7
7	6	0.5	27.4107	28.4098	0.964832	7
7	7	0.2	12.2105	21.2419	0.57483	7
7	7	0.3	17.7283	20.6119	0.860101	7
7	7	0.4	23.2494	24.373	0.953904	7
7	7	0.5	28.143	28.7229	0.979809	7
7	8	0.2	13.0223	15.7441	0.827124	7
7	8	0.3	18.4232	19.924	0.924669	7
7	8	0.4	23.8089	24.7118	0.963463	7
7	8	0.5	28.3861	28.9031	0.982112	7
7	9	0.2	13.0329	14.979	0.870075	7
7	9	0.3	19.0578	20.3586	0.936106	7
7	9	0.4	24.2179	24.9789	0.969536	7
7	9	0.5	28.5092	28.9063	0.986263	7
7	10	0.1	3.75014	5.08E+08	7.38E-09	7
7	10	0.2	13.0559	14.7726	0.883793	7
7	10	0.3	18.9366	20.1066	0.941811	7
7	10	0.4	24.1818	24.85	0.973111	7
7	10	0.5	28.3438	28.7118	0.987183	7
						8
8	3	0.4	27.9314	29.5949	0.94379	8
						8
8	4	0.3	21.7223	26.3627	0.82398	8
8	4	0.4	26.7789	28.8808	0.927219	8
						8
8	5	0.2	9.71726	16.1729	0.600834	8
8	5	0.3	19.8931	24.0911	0.825742	8
8	5	0.4	23.8165	25.7018	0.926646	8
8	6	0.2	14.1913	18.5367	0.765581	8
8	6	0.3	19.3876	21.7865	0.889892	8
8	6	0.4	23.8156	25.3305	0.940193	8
8	7	0.2	12.9141	17.6165	0.733065	8
8	7	0.3	17.8057	20.3377	0.875505	8
8	7	0.4	23.3041	24.3601	0.956654	8
8	8	0.2	13.2573	15.3822	0.861854	8
8	8	0.3	18.5345	19.8603	0.933243	8
8	8	0.4	23.8903	24.7044	0.967047	8
8	9	0.2	13.1613	14.7426	0.892735	8
8	9	0.3	19.1866	20.3116	0.944611	8

8	9	0.4	24.3269	24.9722	0.974157		8
8	10	0.1	3.89051	4.86E+08	8.01E-09		8
8	10	0.2	13.1715	14.5312	0.906429		8
8	10	0.3	19.0738	20.0382	0.951872		8
8	10	0.4	24.2873	24.8403	0.977738		8
							9
9	3	0.4	28.1317	29.5996	0.950406		9
9	4	0.3	21.8587	26.2491	0.832741		9
9	4	0.4	26.8534	28.8587	0.930513		9
9	5	0.2	8.66633	12.4979	0.693421		9
9	5	0.3	20.0533	24.0344	0.834359		9
9	5	0.4	23.862	25.6711	0.929528		9
9	6	0.2	14.3841	18.398	0.78183		9
9	6	0.3	19.4123	21.7642	0.891937		9
9	6	0.4	23.817	25.3515	0.939471		9
9	7	0.2	13.2467	16.7484	0.790924		9
9	7	0.3	17.8827	20.2021	0.885191		9
9	7	0.4	23.3081	24.3654	0.956606		9
9	8	0.2	13.2895	15.349	0.865824		9
9	8	0.3	18.5579	19.8473	0.935033		9
9	8	0.4	23.8993	24.7051	0.967383		9
9	9	0.2	13.1937	14.6626	0.899825		9
9	9	0.3	19.2221	20.2659	0.948495		9
9	9	0.4	24.3367	24.9752	0.974432		9
9	10	0.1	4.43518	4.15E+08	1.07E-08		9
9	10	0.2	13.2162	14.5078	0.910972		9
9	10	0.3	19.1071	20.0186	0.95447		9
9	10	0.4	24.2979	24.8408	0.978148		9
							10
10	3	0.4	28.2862	29.6001	0.955613		10
10	4	0.3	22.125	26.0546	0.84918		10
10	4	0.4	27.01	28.8428	0.936456		10
10	5	0.2	15.9359	18.2309	0.874115		10
10	5	0.3	20.2036	24.0035	0.841696		10
10	5	0.4	23.9351	25.6552	0.932953		10
10	6	0.2	14.6528	18.065	0.811117		10
10	6	0.3	19.5569	21.577	0.906376		10
10	6	0.4	23.8454	25.3447	0.940845		10
10	7	0.2	13.3581	16.3677	0.816127		10
10	7	0.3	17.9674	20.129	0.892615		10
10	7	0.4	23.3365	24.3694	0.957615		10
10	8	0.2	13.397	15.3087	0.875126		10
10	8	0.3	18.6163	19.8283	0.938874		10
10	8	0.4	23.9348	24.7051	0.968821		10
10	9	0.2	13.2501	14.5948	0.907867		10
10	9	0.3	19.2914	20.2216	0.953997		10
10	9	0.4	24.3752	24.9805	0.975773		10
10	10	0.1	4.28564	1.07E+09	3.99E-09		10
10	10	0.2	13.2632	14.48	0.91597		10
10	10	0.3	19.1613	19.9795	0.959051		10
10	10	0.4	24.3313	24.8399	0.979525		10

combined_Cases

d	rmin	J	J*	J/J*		p	d
1	1	59.458	69.2724	0.858321			
2	0.5	55.964	64.9694	0.86139		2	2
2	0.6	55.9659	64.3707	0.869431		2	2
2	0.7	55.9714	63.6059	0.879971		2	2
2	0.8	55.9827	62.8173	0.8912		2	2
2	0.9	56.0037	62.0192	0.903006		2	2
2	1	56.0338	61.3388	0.913514		2	2
3	0.4	22.2551	532.975	0.0417564		2	3
3	0.5	37.6524	118.52	0.317688		2	3
3	0.6	50.0938	67.1326	0.746192		2	3
3	0.7	54.3713	59.1582	0.919083		2	3
3	0.8	55.6804	57.7637	0.963934		2	3
3	0.9	55.7952	56.4711	0.988031		2	3
3	1	56.0778	55.8726	1.00367		2	3
1	1	60.1105	69.2724	0.867741			
2	0.5	57.6525	57.5135	1.00242		3	2
2	0.6	57.6528	57.5086	1.00251		3	2
2	0.7	57.6538	57.5039	1.00261		3	2
2	0.8	57.6558	57.5008	1.0027		3	2
2	0.9	57.6567	57.4977	1.00277		3	2
2	1	57.6567	57.4954	1.00281		3	2
3	0.4	38.4406	253.001	0.151939		3	3
3	0.5	49.7914	81.6971	0.609464		3	3
3	0.6	53.9413	60.5047	0.891522		3	3
3	0.7	55.5799	55.9145	0.994016		3	3
3	0.8	56.2032	54.9953	1.02196		3	3
3	0.9	56.2319	54.9785	1.0228		3	3
3	1	56.3422	54.9342	1.02563		3	3
4	0.3	24.3113	479.366	0.0507155		3	4
4	0.4	43.8075	72.8971	0.60095		3	4
4	0.5	53.2879	63.3341	0.841379		3	4
4	0.6	55.2517	57.1509	0.966768		3	4
4	0.7	55.6626	54.9342	1.01326		3	4
4	0.8	56.1838	53.8728	1.0429		3	4
4	0.9	56.3952	53.674	1.0507		3	4
4	1	56.4684	53.6796	1.05195		3	4
5	0.2	7.38468	8.41E+08	8.79E-09		3	5
5	0.3	27.6064	169.131	0.163225		3	5
5	0.4	43.6381	70.2178	0.621467		3	5
5	0.5	51.974	56.6637	0.917236		3	5
5	0.6	55.3848	55.1039	1.0051		3	5
5	0.7	55.8743	54.0504	1.03375		3	5
5	0.8	56.0975	53.4147	1.05022		3	5
5	0.9	56.4123	53.1735	1.06091		3	5

5	1	56.5181	53.155	1.06327	3	5
1	1	55.2655	69.2724	0.797799		
2	0.5	54.4473	57.4879	0.947109	4	2
2	0.6	54.4476	57.4863	0.94714	4	2
2	0.7	54.4482	57.4846	0.94718	4	2
2	0.8	54.449	57.4841	0.947201	4	2
2	0.9	54.4506	57.4852	0.947211	4	2
2	1	54.451	57.4864	0.947197	4	2
3	0.4	32.4511	288.905	0.112325	4	3
3	0.5	46.0209	96.145	0.478661	4	3
3	0.6	54.2467	54.6279	0.993022	4	3
3	0.7	54.2458	54.6239	0.993078	4	3
3	0.8	54.2413	54.6555	0.992421	4	3
3	0.9	54.288	54.5187	0.995767	4	3
3	1	54.309	54.5243	0.996051	4	3
4	0.3	31.1711	333.728	0.0934027	4	4
4	0.4	47.207	72.5533	0.650652	4	4
4	0.5	52.9983	54.5098	0.972271	4	4
4	0.6	53.2127	54.1803	0.98214	4	4
4	0.7	53.7665	53.6289	1.00257	4	4
4	0.8	53.704	53.7062	0.999958	4	4
4	0.9	53.9447	53.5017	1.00828	4	4
4	1	54.0161	53.4549	1.0105	4	4
5	0.2	10.4905	6.39E+08	1.64E-08	4	5
5	0.3	37.4417	104.203	0.359316	4	5
5	0.4	50.2237	64.4517	0.779245	4	5
5	0.5	52.923	55.8893	0.946924	4	5
5	0.6	53.5076	53.1409	1.0069	4	5
5	0.7	53.8282	52.9737	1.01613	4	5
5	0.8	53.9821	52.9641	1.01922	4	5
5	0.9	53.9831	52.9461	1.01959	4	5
5	1	54.0435	52.9336	1.02097	4	5
6	0.2	16.818	1694.85	0.00992302	4	6
6	0.3	42.3047	101.451	0.416996	4	6
6	0.4	51.9873	55.2013	0.941777	4	6
6	0.5	53.3114	53.477	0.996904	4	6
6	0.6	53.5832	52.9386	1.01218	4	6
6	0.7	53.7006	52.7817	1.01741	4	6
6	0.8	54.0002	52.6825	1.02501	4	6
6	0.9	53.9606	52.7024	1.02388	4	6
6	1	54.0492	52.6728	1.02613	4	6
1	1	69.2724	69.2724	1		
2	0.5	53.9634	57.5163	0.938228	5	2
2	0.6	53.9636	57.5189	0.938188	5	2
2	0.7	53.9634	57.5184	0.938194	5	2
2	0.8	53.9635	57.5204	0.938162	5	2
2	0.9	53.9635	57.5227	0.938126	5	2
2	1	53.9637	57.526	0.938075	5	2
3	0.4	53.8512	54.4778	0.988499	5	3
3	0.5	53.8523	54.4729	0.988606	5	3
3	0.6	53.8551	54.4689	0.988732	5	3
3	0.7	53.8658	54.4729	0.988855	5	3
3	0.8	53.8814	54.4899	0.988833	5	3

3	0.9	53.8797	54.4864	0.988864	5	3
3	1	53.8897	54.4984	0.988832	5	3
4	0.3	34.9334	332.447	0.10508	5	4
4	0.4	49.4864	72.6001	0.681631	5	4
4	0.5	53.4755	53.8434	0.993167	5	4
4	0.6	53.4107	54.0967	0.987319	5	4
4	0.7	53.7514	53.403	1.00652	5	4
4	0.8	53.7692	53.3618	1.00764	5	4
4	0.9	53.8065	53.3602	1.00836	5	4
4	1	53.8103	53.3639	1.00837	5	4
5	0.2	15.3351	4.70E+08	3.26E-08	5	5
5	0.3	42.6137	79.8437	0.533714	5	5
5	0.4	52.7618	56.7253	0.930129	5	5
5	0.5	53.1544	53.573	0.992185	5	5
5	0.6	53.2836	53.2384	1.00085	5	5
5	0.7	53.5308	52.9626	1.01073	5	5
5	0.8	53.6945	52.8759	1.01548	5	5
5	0.9	53.6863	52.8544	1.01574	5	5
5	1	53.7576	52.8505	1.01716	5	5
6	0.2	20.9518	481.955	0.0434725	5	6
6	0.3	48.9406	66.2291	0.738959	5	6
6	0.4	52.4127	54.2295	0.966498	5	6
6	0.5	53.0649	53.0483	1.00031	5	6
6	0.6	53.4593	52.6798	1.0148	5	6
6	0.7	53.5267	52.692	1.01584	5	6
6	0.8	53.6515	52.6068	1.01986	5	6
6	0.9	53.6994	52.5924	1.02105	5	6
6	1	53.7143	52.5837	1.0215	5	6
7	0.2	22.0105	256.142	0.0859309	5	7
7	0.3	44.8875	89.5961	0.500998	5	7
7	0.4	52.6709	54.001	0.975371	5	7
7	0.5	53.3698	52.5597	1.01541	5	7
7	0.6	53.3777	52.5666	1.01543	5	7
7	0.7	53.5428	52.5196	1.01948	5	7
7	0.8	53.6397	52.4542	1.0226	5	7
7	0.9	53.7162	52.4374	1.02439	5	7
7	1	53.7181	52.429	1.02459	5	7
8	0.2	27.3248	143.719	0.190126	5	8
8	0.3	47.7963	71.5973	0.667572	5	8
8	0.4	52.8181	53.0722	0.995212	5	8
8	0.5	53.285	52.5062	1.01483	5	8
8	0.6	53.4175	52.4475	1.01849	5	8
8	0.7	53.5535	52.4044	1.02193	5	8
8	0.8	53.6206	52.3556	1.02416	5	8
8	0.9	53.7196	52.3384	1.02639	5	8
8	1	53.7193	52.3283	1.02658	5	8
1	1	57.1753	69.2724	0.825369		
2	0.5	53.0719	57.5967	0.92144		
2	0.6	53.0721	57.6011	0.921372		
2	0.7	53.0721	57.6021	0.921358		
2	0.8	53.0721	57.6053	0.921306		
2	0.9	53.0722	57.6102	0.92123		
2	1	53.0724	57.614	0.921171		

3	0.4	53.0133	54.4923	0.972858
3	0.5	53.0142	54.4933	0.972857
3	0.6	53.0163	54.4964	0.97284
3	0.7	53.0235	54.5093	0.972742
3	0.8	53.0331	54.5274	0.972594
3	0.9	53.0354	54.5311	0.972571
3	1	53.0414	54.541	0.972505
4	0.3	52.9729	53.3562	0.992818
4	0.4	52.9762	53.3474	0.99304
4	0.5	52.9956	53.3619	0.993136
4	0.6	52.9974	53.3636	0.993137
4	0.7	53.0093	53.3797	0.993062
4	0.8	53.0125	53.3824	0.99307
4	0.9	53.0176	53.3885	0.993052
4	1	53.0268	53.3996	0.993018
5	0.2	7.95853	7.75E+08	1.03E-08
5	0.3	40.2385	81.6077	0.493073
5	0.4	52.9336	52.8446	1.00168
5	0.5	52.9379	52.8318	1.00201
5	0.6	52.9638	52.8384	1.00237
5	0.7	52.9776	52.8386	1.00263
5	0.8	52.9974	52.8513	1.00276
5	0.9	52.9944	52.8483	1.00276
5	1	53.0098	52.8588	1.00286
6	0.2	22.9007	250.671	0.0913577
6	0.3	49.5363	64.1305	0.77243
6	0.4	52.0868	53.9157	0.966078
6	0.5	52.4678	53.0564	0.988906
6	0.6	52.8887	52.5581	1.00629
6	0.7	52.9524	52.5604	1.00746
6	0.8	52.9822	52.5624	1.00799
6	0.9	52.9889	52.564	1.00808
6	1	52.9882	52.5616	1.00812
7	0.2	29.9001	163.073	0.183354
7	0.3	47.4901	67.1889	0.706815
7	0.4	52.3053	53.2094	0.98301
7	0.5	52.7815	52.441	1.00649
7	0.6	52.7927	52.4426	1.00667
7	0.7	52.9332	52.3974	1.01023
7	0.8	52.9605	52.3891	1.01091
7	0.9	52.9773	52.3917	1.01118
7	1	52.9852	52.3903	1.01135
8	0.2	31.2937	134.215	0.233161
8	0.3	48.3945	68.3462	0.708078
8	0.4	52.2874	52.897	0.988477
8	0.5	52.7614	52.3416	1.00802
8	0.6	52.8212	52.3103	1.00977
8	0.7	52.921	52.2904	1.01206
8	0.8	52.9504	52.2818	1.01279
8	0.9	52.9749	52.2824	1.01325
8	1	52.9797	52.2789	1.01341
9	0.2	34.3273	136.447	0.25158
9	0.3	51.1309	57.3107	0.89217

9	0.4	52.759	52.2693	1.00937			
9	0.5	52.7979	52.2489	1.01051			
2	0.5	52.9158	57.6552	0.917797		7	2
3	0.4	52.8387	54.5195	0.969171		7	3
3	0.5	52.8399	54.5254	0.969088		7	3
4	0.3	52.7928	53.3572	0.989423		7	4
4	0.4	52.7963	53.3515	0.989592		7	4
4	0.5	52.8105	53.361	0.989682		7	4
5	0.2	23.6515	3.46E+08	6.84E-08		7	5
5	0.3	52.7602	52.8419	0.998455		7	5
5	0.4	52.7796	52.8243	0.999155		7	5
5	0.5	52.7831	52.8217	0.99927		7	5
6	0.2	24.4677	256.003	0.0955762		7	6
6	0.3	52.7369	52.5514	1.00353		7	6
6	0.4	52.7463	52.5406	1.00392		7	6
6	0.5	52.7587	52.5416	1.00413		7	6
7	0.2	31.5783	121.525	0.259851		7	7
7	0.3	51.1603	55.3614	0.924114		7	7
7	0.4	52.1698	53.1091	0.982313		7	7
7	0.5	52.7452	52.3789	1.00699		7	7
8	0.2	38.4315	119.026	0.322884		7	8
8	0.3	51.1683	55.7096	0.918483		7	8
8	0.4	52.2303	52.7961	0.989284		7	8
8	0.5	52.6503	52.3001	1.0067		7	8
9	0.2	39.27	104.811	0.374674		7	9
9	0.3	51.9517	54.2414	0.957786		7	9
9	0.4	52.6324	52.2352	1.0076		7	9
9	0.5	52.7192	52.2117	1.00972		7	9
10	0.1	5.81862	7.71E+08	7.55E-09		7	10
10	0.2	36.2899	135.657	0.267513		7	10
10	0.3	52.1346	52.861	0.986257		7	10
10	0.4	52.6195	52.1885	1.00826		7	10
10	0.5	52.6651	52.1666	1.00956		7	10
2	0.5	52.5406	57.6935	0.910684		8	2
3	0.4	52.5156	54.5612	0.962509		8	3
3	0.5	52.5163	54.5681	0.962401		8	3
4	0.3	52.4919	53.3674	0.983595		8	4
4	0.4	52.493	53.37	0.983567		8	4
4	0.5	52.4998	53.3863	0.983394		8	4
5	0.2	31.7568	1148.85	0.0276421		8	5
5	0.3	52.4677	52.8226	0.993281		8	5
5	0.4	52.4814	52.8247	0.993502		8	5
6	0.2	33.0459	268.728	0.122972		8	6
6	0.3	52.4577	52.5285	0.998651		8	6
6	0.4	52.4681	52.5311	0.998802		8	6
7	0.2	34.8652	106.179	0.328361		8	7
7	0.3	52.4441	52.3608	1.00159		8	7
7	0.4	52.4524	52.3563	1.00184		8	7
8	0.2	44.7119	72.2357	0.618973		8	8
8	0.3	52.43	52.2532	1.00338		8	8
8	0.4	52.4266	52.251	1.00336		8	8
9	0.2	45.3203	70.5444	0.642437		8	9
9	0.3	52.4153	52.1814	1.00448			

9	0.4	52.4296	52.1755	1.00487
10	0.1	6.34472	8.03E+08	7.91E-09
10	0.2	43.9686	80.5025	0.546176
10	0.3	51.9139	52.6927	0.98522
10	0.4	52.4049	52.1304	1.00527
2	0.5	52.4838	57.7093	0.909451
3	0.4	52.4269	54.5836	0.960489
4	0.3	52.4103	53.3844	0.981753
4	0.4	52.4114	53.3893	0.981683
5	0.2	52.3912	52.8253	0.991783
5	0.3	52.3924	52.8229	0.99185
5	0.4	52.3978	52.8313	0.991794
6	0.2	35.1758	271.712	0.12946
6	0.3	52.3811	52.525	0.997259
6	0.4	52.3901	52.5324	0.997291
7	0.2	39.0253	111.183	0.351002
7	0.3	52.3718	52.3525	1.00037
7	0.4	52.3802	52.3534	1.00051
8	0.2	52.344	52.2611	1.00159
8	0.3	52.3615	52.242	1.00229
8	0.4	52.3708	52.2406	1.00249
9	0.2	52.3376	52.1839	1.00295
9	0.3	52.3513	52.1684	1.00351
9	0.4	52.364	52.1653	1.00381
10	0.1	6.76464	-8.76E+08	-7.72E-09
10	0.2	48.3536	59.1838	0.817007
10	0.3	52.336	52.121	1.00413
10	0.4	52.3574	52.1134	1.00468
2	0.5	52.2869	57.7317	0.905689
3	0.4	52.269	54.6104	0.957126
4	0.3	52.2601	53.4068	0.978529
4	0.4	52.2608	53.4115	0.978456
5	0.2	52.2494	52.8319	0.988973
5	0.3	52.2499	52.8372	0.988884
5	0.4	52.2526	52.846	0.98877
6	0.2	52.2375	52.5283	0.994463
6	0.3	52.2405	52.5307	0.994475
6	0.4	52.2467	52.5391	0.994433
7	0.2	42.0902	101.06	0.416489
7	0.3	52.236	52.3517	0.997792
7	0.4	52.2413	52.3564	0.997801
8	0.2	52.2172	52.2379	0.999605
8	0.3	52.2303	52.2361	0.999888
8	0.4	52.2375	52.2403	0.999945
9	0.2	52.2125	52.1617	1.00097
9	0.3	52.2244	52.1587	1.00126
9	0.4	52.2327	52.1609	1.00138
10	0.1	7.40488	7.48E+08	9.90E-09
10	0.2	52.2054	52.1132	1.00177
10	0.3	52.2162	52.105	1.00213
10	0.4	52.2283	52.1055	1.00236

rmin	J	J*	J/J*
0.5	53.5881	1.14E+09	4.70E-08
0.6	107.062	235.138	0.455316
0.7	118.839	125.89	0.943991
0.8	122.526	112.086	1.09315
0.9	124.264	107.813	1.15258
1	125.255	106.026	1.18136
0.4	59.0007	149.159	0.395556
0.5	82.2338	138.45	0.593961
0.6	104.445	106.352	0.982072
0.7	114.791	101.457	1.13142
0.8	118.694	100.448	1.18165
0.9	121.697	99.8637	1.21863
1	123.091	99.7639	1.23383
0.5	104.025	104.867	0.991967
0.6	104.025	104.842	0.992209
0.7	104.025	104.798	0.99263
0.8	104.027	104.76	0.993001
0.9	104.029	104.723	0.993365
1	104.034	104.659	0.994025
0.4	82.0728	163.859	0.500875
0.5	91.4746	102.645	0.891176
0.6	96.7114	100.861	0.958855
0.7	99.6318	101.139	0.985098
0.8	100.888	100.378	1.00508
0.9	102.23	99.713	1.02524
1	102.896	99.5146	1.03398
0.3	43.5799	958.591	0.0454625
0.4	85.2404	132.954	0.641127
0.5	94.2861	102.165	0.922884
0.6	96.2608	100.65	0.956396
0.7	98.8387	98.9872	0.998499
0.8	101.041	98.6484	1.02426
0.9	102.018	98.1203	1.03972
1	102.61	98.01	1.04693
0.2	12.1535	9.14E+08	1.33E-08
0.3	55.8079	571.238	0.0976964
0.4	83.1664	130.381	0.637871
0.5	94.9269	103.676	0.915608
0.6	97.7532	100.276	0.974845
0.7	99.4143	98.6304	1.00795
0.8	101.263	98.2473	1.03069
0.9	102.322	97.7177	1.04712

			combined_Cases
1	102.954	97.5106	1.05583
0.5	99.4023	104.657	0.949795
0.6	99.4024	104.663	0.94974
0.7	99.4029	104.676	0.949624
0.8	99.4034	104.687	0.949531
0.9	99.4041	104.697	0.949445
1	99.4054	104.713	0.94931
0.4	91.5653	98.8056	0.926721
0.5	94.606	102.7	0.921191
0.6	96.8786	100.345	0.965459
0.7	98.1073	99.7093	0.983934
0.8	98.5698	99.4898	0.990752
0.9	98.8225	99.3053	0.995138
1	98.986	99.3012	0.996825
0.3	54.573	496.92	0.109823
0.4	85.7719	115.713	0.74125
0.5	96.9199	100.761	0.961874
0.6	96.6742	100.161	0.965184
0.7	97.5861	98.4313	0.991413
0.8	98.266	97.9829	1.00289
0.9	98.4608	97.9015	1.00571
1	98.7476	97.887	1.00879
0.2	16.8085	1.34E+09	1.26E-08
0.3	60.8167	187.468	0.324412
0.4	87.9017	111.315	0.789663
0.5	95.8893	98.6971	0.971552
0.6	97.5153	98.7004	0.987993
0.7	98.0207	97.8929	1.00131
0.8	98.3793	97.5257	1.00875
0.9	98.672	97.3955	1.01311
1	98.8792	97.3595	1.01561
0.2	29.6661	725.159	0.0409097
0.3	69.2795	231.177	0.299682
0.4	91.0672	101.32	0.898804
0.5	96.7746	98.0249	0.987245
0.6	97.6632	97.7049	0.999573
0.7	98.0159	97.5616	1.00466
0.8	98.4717	97.2929	1.01212
0.9	98.7262	97.1466	1.01626
1	98.8868	97.0775	1.01864
0.5	98.6878	105.126	0.93876
0.6	98.6878	105.136	0.938666
0.7	98.6882	105.163	0.93843
0.8	98.6888	105.184	0.938248
0.9	98.6895	105.204	0.93808
1	98.6905	105.225	0.937899
0.4	93.6304	97.1215	0.964055
0.5	97.3233	99.8436	0.974758
0.6	98.0345	99.3721	0.98654
0.7	98.2529	99.2367	0.990086
0.8	98.3476	99.2727	0.990681

0.9	98.3738	99.2926	0.990747
1	98.3951	99.3124	0.990764
0.3	58.9923	443.867	0.132905
0.4	87.9516	114.815	0.76603
0.5	97.3332	100.658	0.966966
0.6	97.8045	98.7198	0.990728
0.7	97.8315	98.2769	0.995468
0.8	98.0397	97.9371	1.00105
0.9	98.1541	97.8969	1.00263
1	98.2919	97.8918	1.00409
0.2	32.9697	5.45E+08	6.05E-08
0.3	76.2219	126.787	0.601183
0.4	90.4735	106.185	0.852038
0.5	96.0963	98.72	0.973423
0.6	97.3116	98.2532	0.990417
0.7	97.7077	97.5792	1.00132
0.8	98.0277	97.3859	1.00659
0.9	98.1865	97.3453	1.00864
1	98.2959	97.3393	1.00983
0.2	42.9702	688.009	0.0624558
0.3	78.7495	183.983	0.428026
0.4	92.4194	102.25	0.903861
0.5	96.7108	97.6441	0.990442
0.6	97.5019	97.4229	1.00081
0.7	97.542	97.3408	1.00207
0.8	97.9931	97.1227	1.00896
0.9	98.199	97.0763	1.01156
1	98.3043	97.0493	1.01293
0.2	41.2307	583.701	0.0706366
0.3	80.7437	303.21	0.266296
0.4	94.3552	99.82	0.945253
0.5	97.2017	97.4801	0.997145
0.6	97.4755	97.1656	1.00319
0.7	97.7209	97.1578	1.0058
0.8	97.9971	96.9798	1.01049
0.9	98.1716	96.9281	1.01283
1	98.3001	96.8824	1.01463
0.2	56.2715	282.772	0.198999
0.3	87.8327	113.651	0.772825
0.4	94.594	100.479	0.941433
0.5	97.3408	97.2826	1.0006
0.6	97.6594	97.0757	1.00601
0.7	97.8236	97.0952	1.0075
0.8	98.0022	96.8871	1.01151
0.9	98.1613	96.835	1.0137
1	98.2886	96.7796	1.01559

0.5	97.4374	105.703	0.921807
0.4	97.3126	99.3761	0.979235
0.5	97.3143	99.3997	0.97902
0.3	85.9479	128.891	0.666829
0.4	94.5895	100.469	0.941477
0.5	97.2727	97.9008	0.993585
0.2	42.631	5.45E+08	7.83E-08
0.3	86.1136	118.187	0.728619
0.4	95.1311	101.177	0.940246
0.5	96.8498	97.8131	0.990151
0.2	42.9578	319.027	0.134652
0.3	93.6802	101.731	0.920864
0.4	96.0832	99.4316	0.966325
0.5	96.4138	97.3911	0.989966
0.2	56.846	181.465	0.313261
0.3	92.0062	107.399	0.856678
0.4	96.22	97.3832	0.988055
0.5	96.964	96.9268	1.00038
0.2	66.8993	167.948	0.398334
0.3	91.9494	100.755	0.912606
0.4	96.4497	96.8128	0.99625
0.5	96.8537	96.8284	1.00026
0.2	68.2142	196.361	0.347392
0.3	93.9141	99.6379	0.942554
0.4	96.6557	96.7957	0.998554
0.5	96.9838	96.7302	1.00262
0.1	10.5096	1.47E+09	7.14E-09
0.2	61.3553	198.249	0.309486
0.3	93.6041	98.3652	0.951598
0.4	96.7539	96.6603	1.00097
0.5	96.9452	96.7	1.00253
0.5	97.0238	105.88	0.916354
0.4	96.9825	99.5202	0.974501
0.5	96.9841	99.5485	0.97424
0.3	91.4725	114.786	0.796898
0.4	96.9594	97.9303	0.990085
0.5	96.9632	97.948	0.989946
0.2	44.1006	5.45E+08	8.10E-08
0.3	87.2731	116.901	0.746557
0.4	95.076	101.118	0.940247
0.2	52.4938	340.784	0.154038
0.3	94.0429	102.233	0.919885
0.4	95.9998	99.4169	0.965629
0.2	57.4595	136.085	0.422233
0.3	92.2111	107.213	0.86007
0.4	96.1976	97.2679	0.988997
0.2	69.9747	94.3134	0.741938
0.3	93.41	99.5267	0.938542
0.4	96.1124	96.8307	0.992583
0.2	75.37	103.302	0.729607