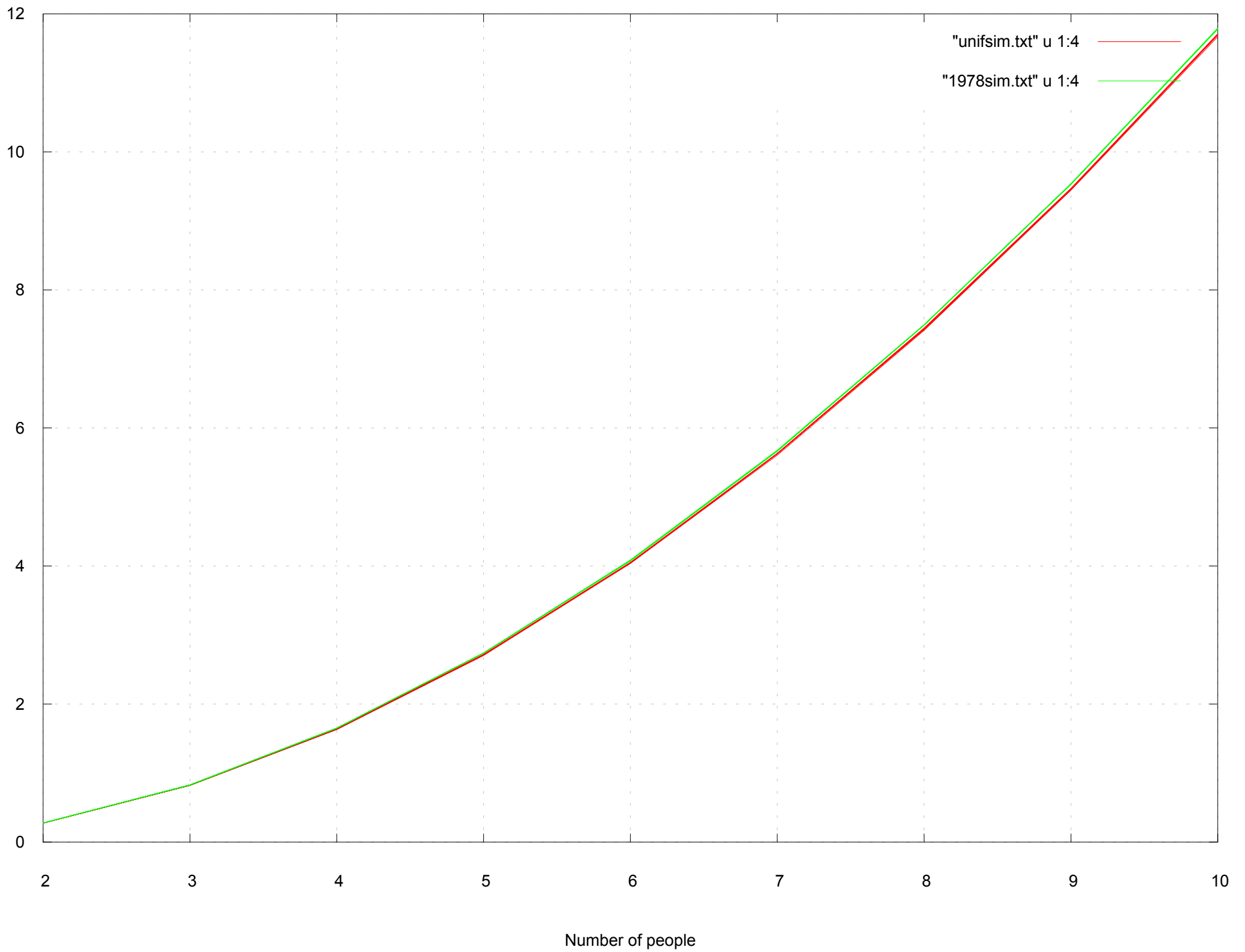
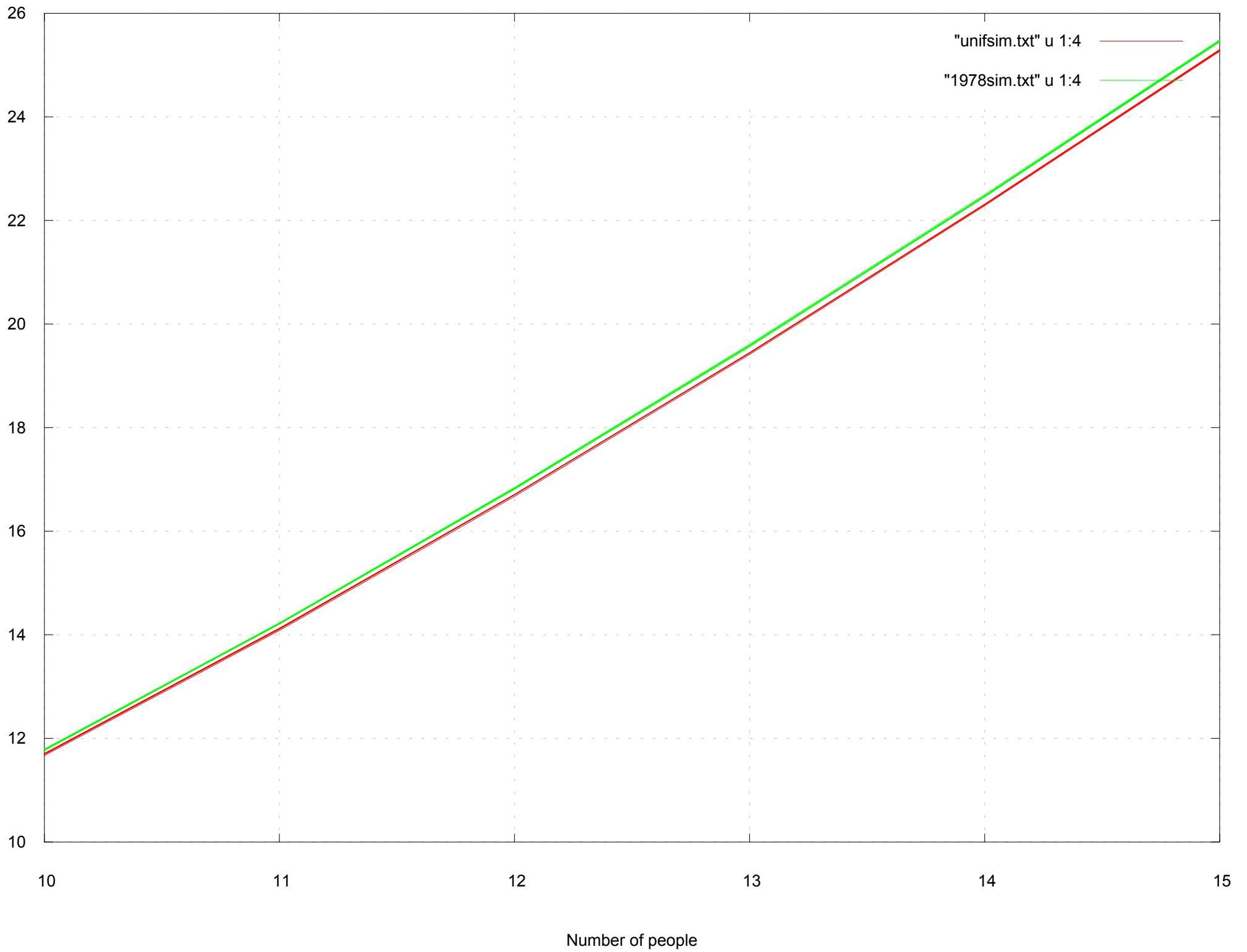


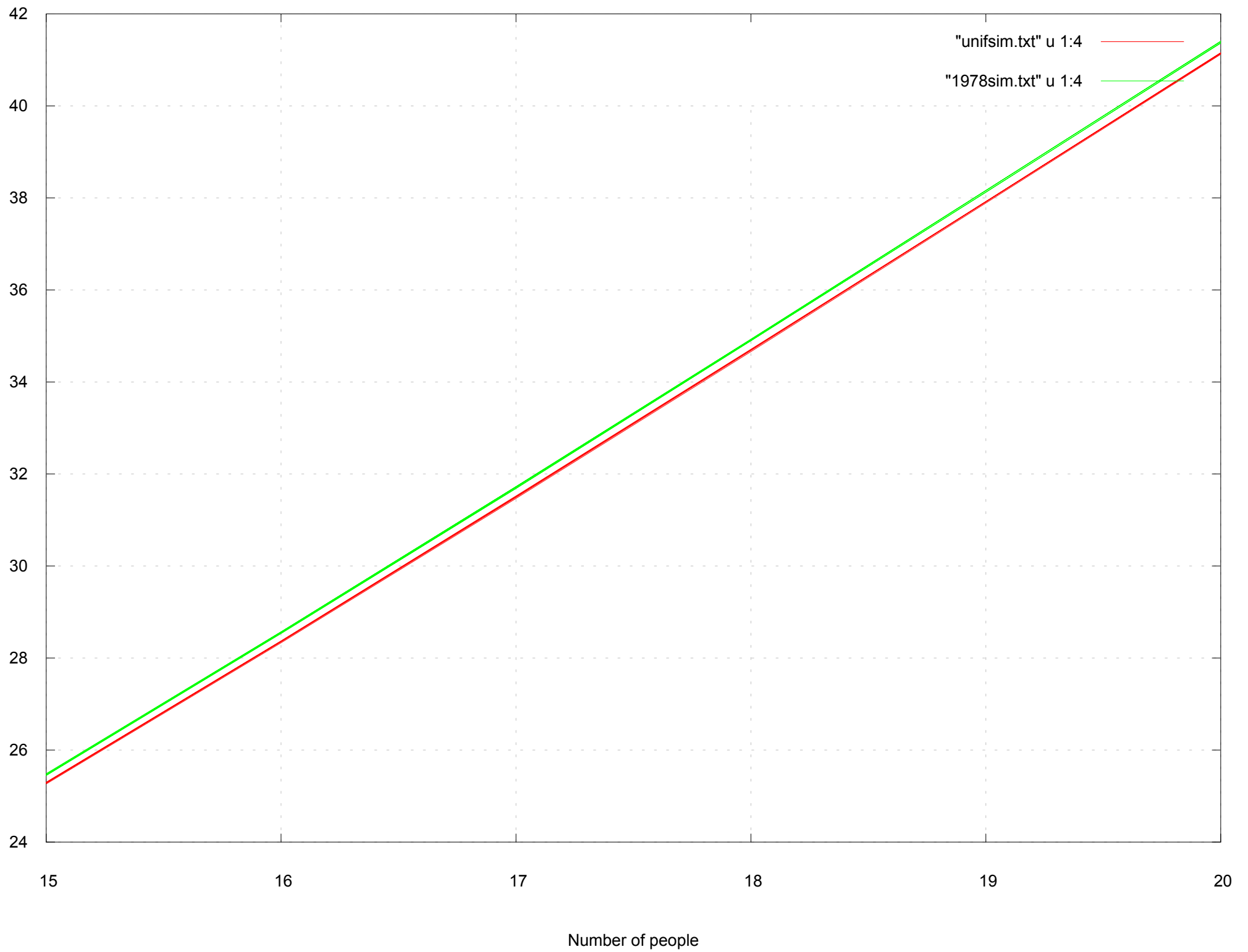
2 with same birthday: Cumulative probability



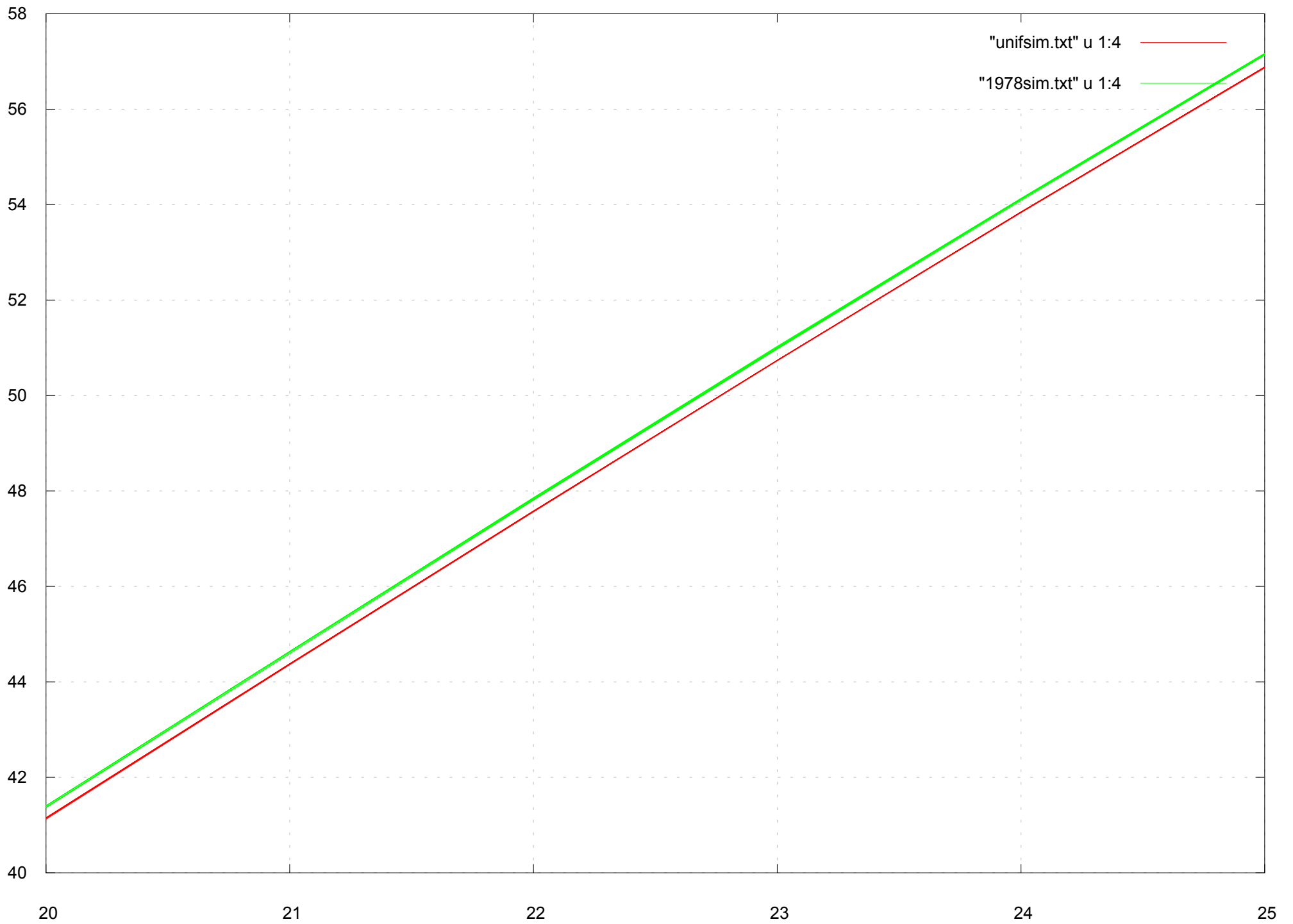
2 with same birthday: Cumulative probability



2 with same birthday: Cumulative probability

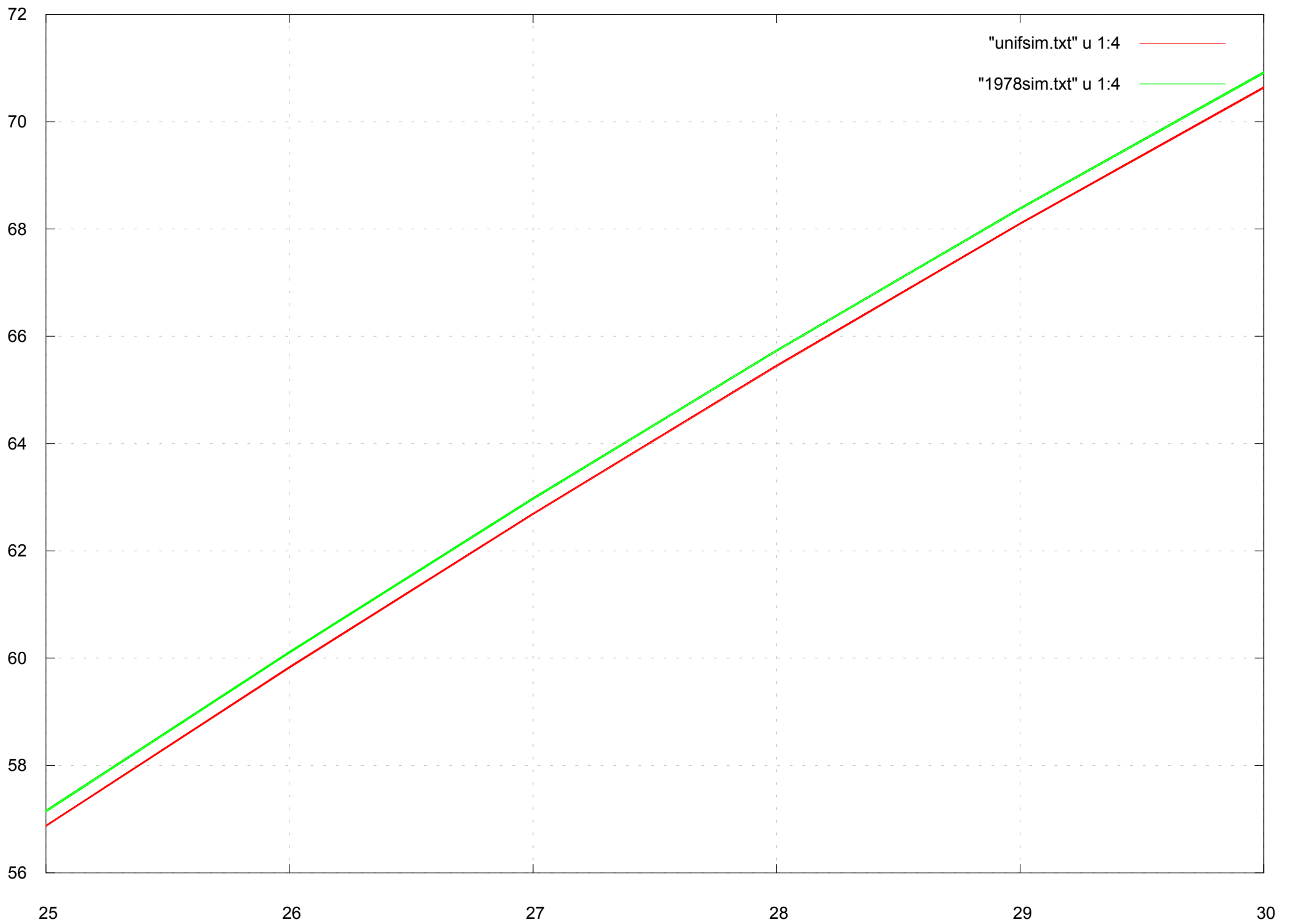


2 with same birthday: Cumulative probability



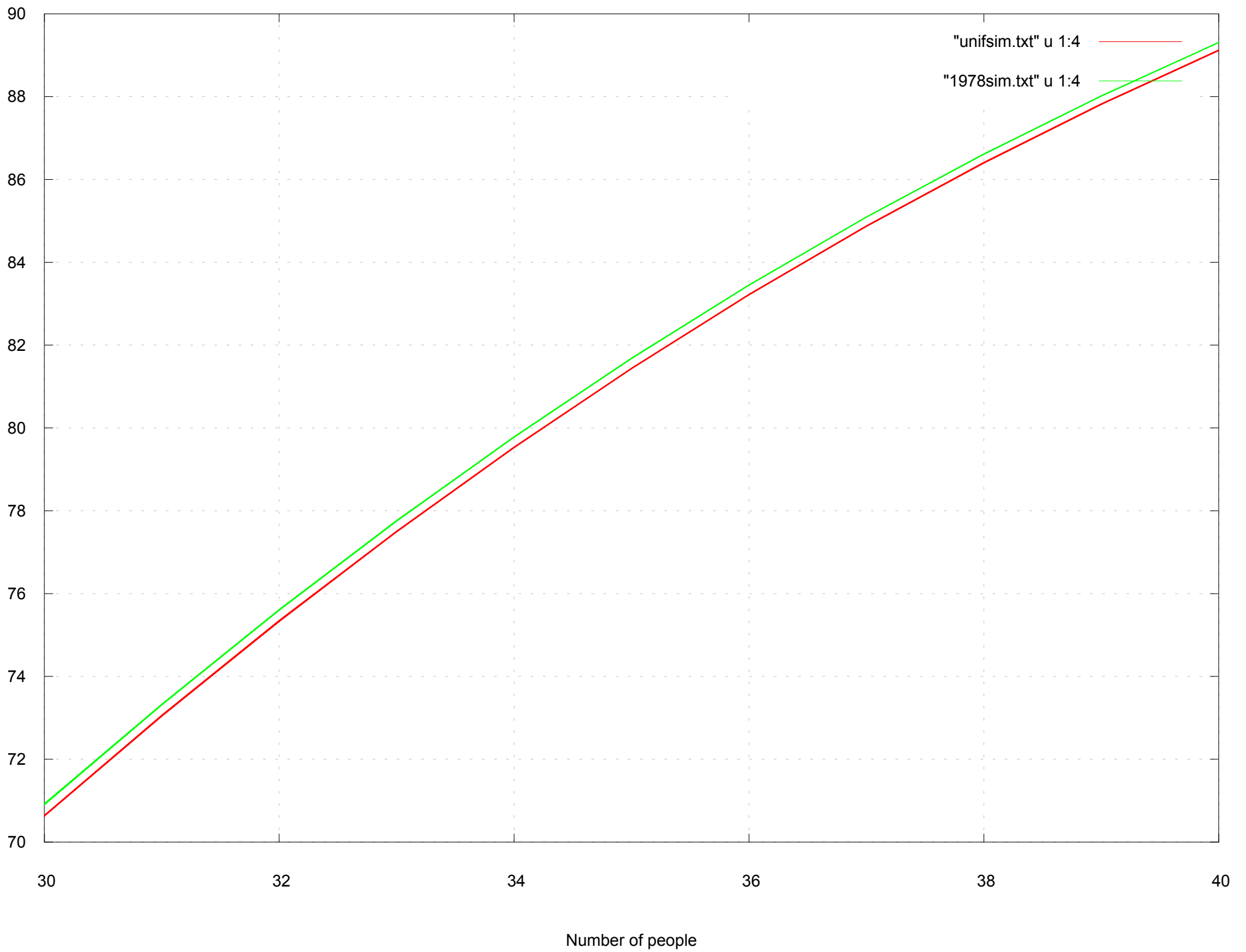
Number of people

2 with same birthday: Cumulative probability

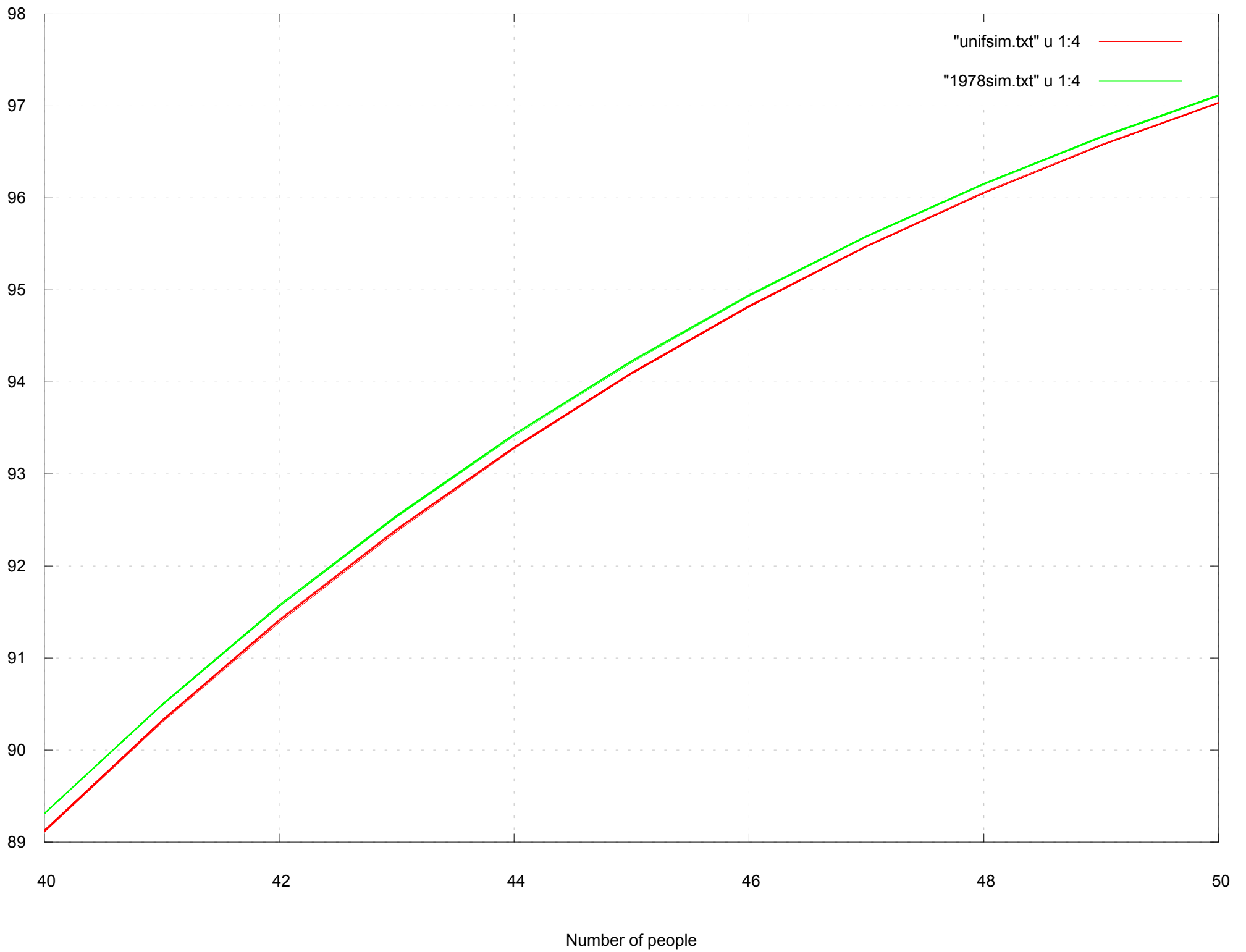


Number of people

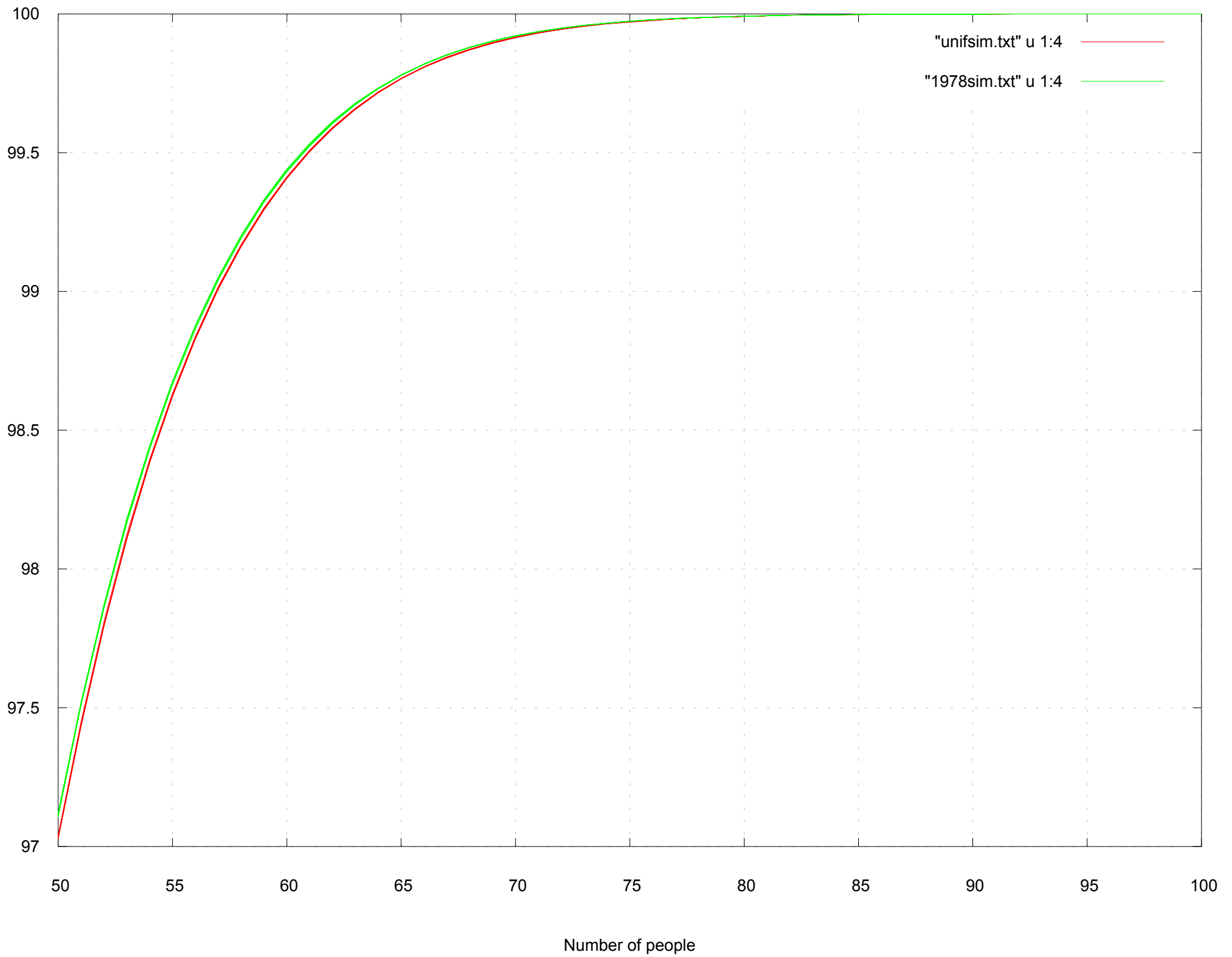
2 with same birthday: Cumulative probability



2 with same birthday: Cumulative probability

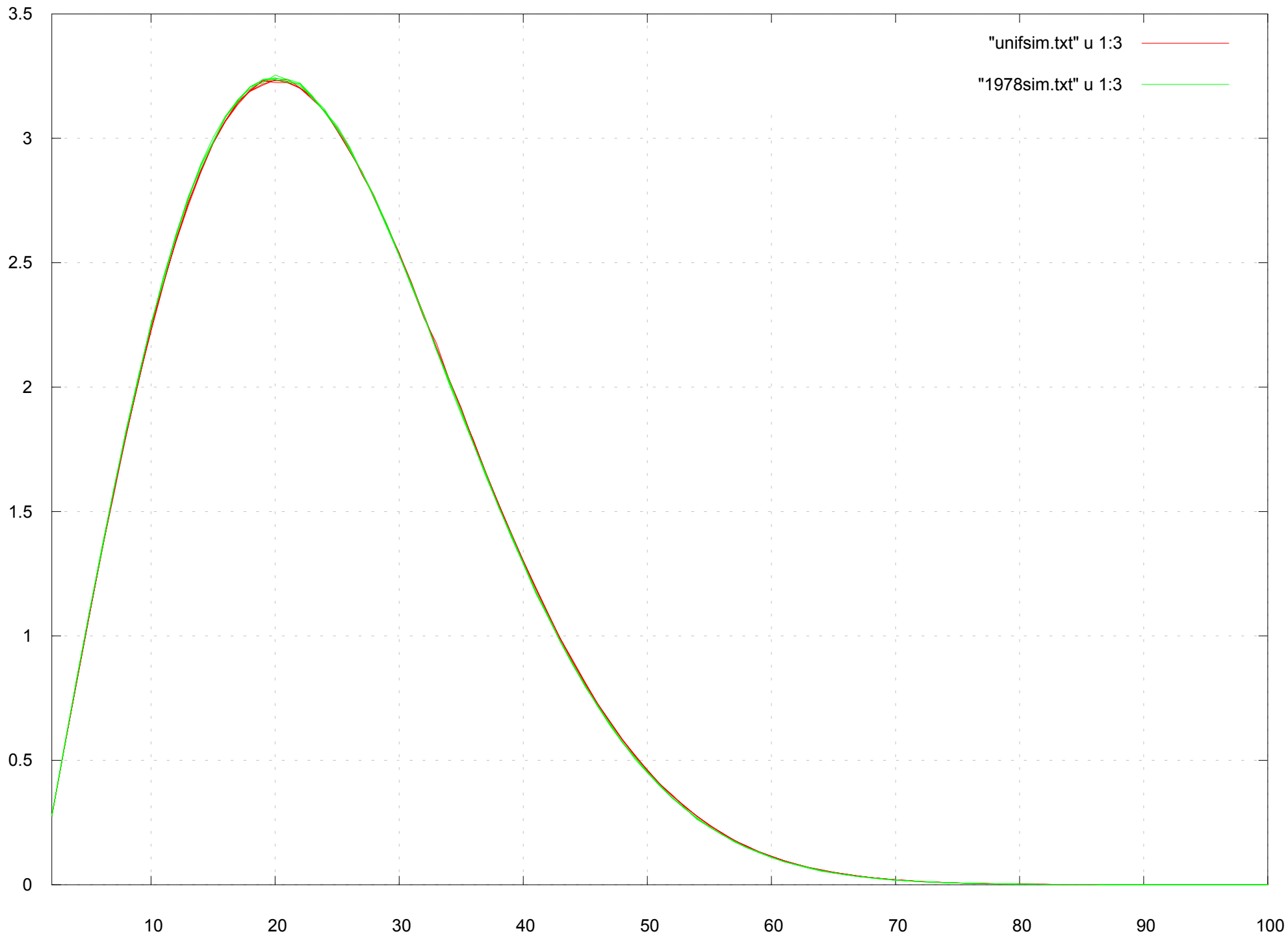


2 with same birthday: Cumulative probability





Probability to see first 2 with same birthday

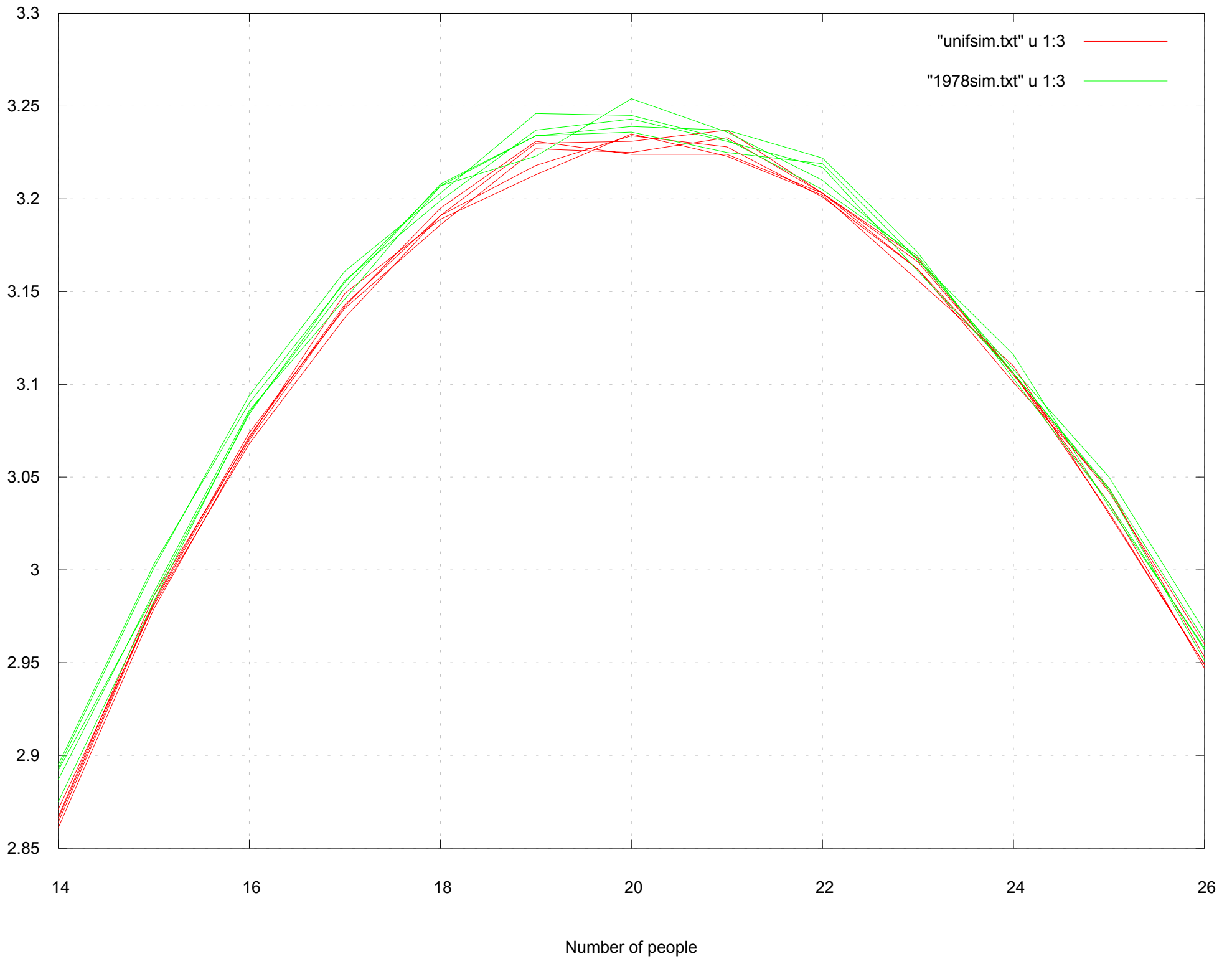


"unifsim.txt" u 1:3

"1978sim.txt" u 1:3

Number of people

Probability to see first 2 with same birthday



#Uniform distribution, 5 simulation runs with  
#10<sup>7</sup> trials each.

#Size	count	Pct.Pr.	Cum.Prob.
2	27784	0.278	0.278
3	54683	0.547	0.825
4	80973	0.810	1.634
5	107798	1.078	2.712
6	133794	1.338	4.050
7	157757	1.578	5.628
8	180421	1.804	7.432
9	202892	2.029	9.461
10	223766	2.238	11.699
11	242140	2.421	14.120
12	258417	2.584	16.704
13	273988	2.740	19.444
14	286367	2.864	22.308
15	298209	2.982	25.290
16	307193	3.072	28.362
17	314280	3.143	31.505
18	319124	3.191	34.696
19	321774	3.218	37.914
20	323450	3.234	41.148
21	322827	3.228	44.376
22	320068	3.201	47.577
23	316247	3.162	50.740
24	310645	3.106	53.846
25	303573	3.036	56.882
26	294740	2.947	59.829
27	286696	2.867	62.696
28	275500	2.755	65.451
29	264499	2.645	68.096
30	253970	2.540	70.636
31	240625	2.406	73.042
32	227646	2.276	75.318
33	217669	2.177	77.495
34	203335	2.033	79.528
35	191684	1.917	81.445
36	177761	1.778	83.223
37	165343	1.653	84.876
38	153042	1.530	86.407
39	141017	1.410	87.817
40	130219	1.302	89.119
41	119276	1.193	90.312
42	109025	1.090	91.402
43	98763	0.988	92.390
44	89372	0.894	93.284
45	81026	0.810	94.094
46	72380	0.724	94.818
47	65336	0.653	95.471
48	58129	0.581	96.052
49	52117	0.521	96.573
50	46065	0.461	97.034
51	40643	0.406	97.440
52	35708	0.357	97.798
53	31553	0.316	98.113
54	27546	0.275	98.389
55	23871	0.239	98.627
56	20868	0.209	98.836
57	17718	0.177	99.013
58	15376	0.154	99.167
59	13161	0.132	99.298
60	11412	0.114	99.413
61	9610	0.096	99.509
62	8258	0.083	99.591
63	6897	0.069	99.660
64	5851	0.059	99.719
65	4896	0.049	99.768
66	4253	0.043	99.810
67	3462	0.035	99.845
68	2827	0.028	99.873
69	2351	0.024	99.897
70	1977	0.020	99.916
71	1619	0.016	99.933
72	1309	0.013	99.946
73	1084	0.011	99.957
74	837	0.008	99.965
75	744	0.007	99.972
76	526	0.005	99.978
77	449	0.004	99.982
78	383	0.004	99.986
79	310	0.003	99.989
80	234	0.002	99.991

81	199	0.002	99.993
82	161	0.002	99.995
83	111	0.001	99.996
84	79	0.001	99.997
85	68	0.001	99.998
86	65	0.001	99.998
87	49	0.000	99.999
88	34	0.000	99.999
89	21	0.000	99.999
90	13	0.000	99.999
91	16	0.000	100.000
92	12	0.000	100.000
93	7	0.000	100.000
94	4	0.000	100.000
95	7	0.000	100.000
96	1	0.000	100.000
97	4	0.000	100.000
98	2	0.000	100.000
99	2	0.000	100.000
100	3	0.000	100.000
101	1	0.000	100.000
102	1	0.000	100.000
103	1	0.000	100.000
105	1	0.000	100.000
2	27549	0.275	0.275
3	54776	0.548	0.823
4	81577	0.816	1.639
5	107756	1.078	2.717
6	132845	1.328	4.045
7	158144	1.581	5.626
8	180990	1.810	7.436
9	202411	2.024	9.460
10	223562	2.236	11.696
11	241970	2.420	14.116
12	258902	2.589	16.705
13	274303	2.743	19.448
14	286722	2.867	22.315
15	298634	2.986	25.301
16	307096	3.071	28.372
17	314933	3.149	31.522
18	318870	3.189	34.710
19	321293	3.213	37.923
20	323494	3.235	41.158
21	322300	3.223	44.381
22	320243	3.202	47.584
23	315599	3.156	50.740
24	311001	3.110	53.850
25	302996	3.030	56.880
26	294940	2.949	59.829
27	286281	2.863	62.692
28	276691	2.767	65.459
29	264728	2.647	68.106
30	253491	2.535	70.641
31	241105	2.411	73.052
32	228857	2.289	75.341
33	215172	2.152	77.492
34	203132	2.031	79.524
35	190250	1.903	81.426
36	178529	1.785	83.211
37	165161	1.652	84.863
38	153212	1.532	86.395
39	141622	1.416	87.811
40	129559	1.296	89.107
41	119083	1.191	90.298
42	108509	1.085	91.383
43	98944	0.989	92.372
44	90170	0.902	93.274
45	81229	0.812	94.086
46	72819	0.728	94.814
47	65457	0.655	95.469
48	58251	0.583	96.052
49	51887	0.519	96.570
50	45705	0.457	97.027
51	40432	0.404	97.432
52	36055	0.361	97.792
53	31379	0.314	98.106
54	27590	0.276	98.382
55	23825	0.238	98.620
56	20739	0.207	98.828
57	17984	0.180	99.008
58	15301	0.153	99.161
59	13218	0.132	99.293

60	11387	0.114	99.407
61	9690	0.097	99.503
62	8206	0.082	99.586
63	7024	0.070	99.656
64	6033	0.060	99.716
65	5009	0.050	99.766
66	4165	0.042	99.808
67	3299	0.033	99.841
68	2931	0.029	99.870
69	2391	0.024	99.894
70	1967	0.020	99.914
71	1693	0.017	99.931
72	1330	0.013	99.944
73	1060	0.011	99.955
74	902	0.009	99.964
75	692	0.007	99.970
76	597	0.006	99.976
77	515	0.005	99.982
78	389	0.004	99.986
79	328	0.003	99.989
80	256	0.003	99.991
81	174	0.002	99.993
82	143	0.001	99.995
83	105	0.001	99.996
84	99	0.001	99.997
85	87	0.001	99.997
86	67	0.001	99.998
87	45	0.000	99.999
88	37	0.000	99.999
89	25	0.000	99.999
90	23	0.000	99.999
91	10	0.000	99.999
92	7	0.000	100.000
93	13	0.000	100.000
94	7	0.000	100.000
95	6	0.000	100.000
96	3	0.000	100.000
97	1	0.000	100.000
98	2	0.000	100.000
99	1	0.000	100.000
100	1	0.000	100.000
101	4	0.000	100.000
102	1	0.000	100.000
103	1	0.000	100.000
114	1	0.000	100.000
2	27572	0.276	0.276
3	54769	0.548	0.823
4	81774	0.818	1.641
5	107901	1.079	2.720
6	133152	1.332	4.052
7	158271	1.583	5.634
8	181586	1.816	7.450
9	202253	2.023	9.473
10	223783	2.238	11.711
11	241880	2.419	14.129
12	258265	2.583	16.712
13	272867	2.729	19.441
14	286143	2.861	22.302
15	297944	2.979	25.282
16	307012	3.070	28.352
17	314162	3.142	31.493
18	319458	3.195	34.688
19	323148	3.231	37.919
20	322404	3.224	41.143
21	322360	3.224	44.367
22	320275	3.203	47.570
23	316835	3.168	50.738
24	310543	3.105	53.844
25	304199	3.042	56.886
26	295970	2.960	59.845
27	285430	2.854	62.700
28	276263	2.763	65.462
29	265222	2.652	68.114
30	253834	2.538	70.653
31	241968	2.420	73.072
32	228519	2.285	75.358
33	215832	2.158	77.516
34	203016	2.030	79.546
35	190233	1.902	81.448
36	178535	1.785	83.234
37	165331	1.653	84.887
38	153284	1.533	86.420

39	141401	1.414	87.834
40	129792	1.298	89.132
41	119122	1.191	90.323
42	108712	1.087	91.410
43	98552	0.986	92.396
44	89518	0.895	93.291
45	80952	0.810	94.100
46	72439	0.724	94.825
47	64961	0.650	95.474
48	58046	0.580	96.055
49	51556	0.516	96.570
50	46205	0.462	97.032
51	40305	0.403	97.436
52	35741	0.357	97.793
53	31726	0.317	98.110
54	27509	0.275	98.385
55	23788	0.238	98.623
56	20863	0.209	98.832
57	17795	0.178	99.010
58	15575	0.156	99.165
59	13132	0.131	99.297
60	11445	0.114	99.411
61	9695	0.097	99.508
62	8252	0.083	99.591
63	6908	0.069	99.660
64	5804	0.058	99.718
65	4949	0.049	99.767
66	4164	0.042	99.809
67	3473	0.035	99.844
68	2898	0.029	99.873
69	2396	0.024	99.897
70	1930	0.019	99.916
71	1604	0.016	99.932
72	1314	0.013	99.945
73	1040	0.010	99.956
74	923	0.009	99.965
75	716	0.007	99.972
76	569	0.006	99.978
77	484	0.005	99.982
78	341	0.003	99.986
79	290	0.003	99.989
80	252	0.003	99.991
81	191	0.002	99.993
82	159	0.002	99.995
83	133	0.001	99.996
84	83	0.001	99.997
85	68	0.001	99.998
86	51	0.001	99.998
87	36	0.000	99.998
88	27	0.000	99.999
89	32	0.000	99.999
90	22	0.000	99.999
91	21	0.000	99.999
92	13	0.000	100.000
93	10	0.000	100.000
94	6	0.000	100.000
95	5	0.000	100.000
96	3	0.000	100.000
97	2	0.000	100.000
99	4	0.000	100.000
100	1	0.000	100.000
101	1	0.000	100.000
104	1	0.000	100.000
105	1	0.000	100.000
2	27484	0.275	0.275
3	54508	0.545	0.820
4	81041	0.810	1.630
5	107303	1.073	2.703
6	133496	1.335	4.038
7	156727	1.567	5.606
8	180969	1.810	7.415
9	203024	2.030	9.446
10	222344	2.223	11.669
11	241285	2.413	14.082
12	259065	2.591	16.672
13	273920	2.739	19.412
14	287142	2.871	22.283
15	298064	2.981	25.264
16	306815	3.068	28.332
17	313616	3.136	31.468
18	319129	3.191	34.659
19	323007	3.230	37.889

20	323117	3.231	41.121
21	323694	3.237	44.357
22	320347	3.203	47.561
23	316572	3.166	50.727
24	310570	3.106	53.832
25	303082	3.031	56.863
26	294932	2.949	59.813
27	286276	2.863	62.675
28	275753	2.758	65.433
29	265525	2.655	68.088
30	253131	2.531	70.619
31	241260	2.413	73.032
32	229077	2.291	75.323
33	216002	2.160	77.483
34	203534	2.035	79.518
35	191125	1.911	81.429
36	177923	1.779	83.209
37	165585	1.656	84.864
38	152806	1.528	86.392
39	141713	1.417	87.810
40	130429	1.304	89.114
41	119651	1.197	90.310
42	109114	1.091	91.402
43	98631	0.986	92.388
44	89503	0.895	93.283
45	80426	0.804	94.087
46	72583	0.726	94.813
47	65366	0.654	95.467
48	58320	0.583	96.050
49	51992	0.520	96.570
50	46027	0.460	97.030
51	40508	0.405	97.435
52	35931	0.359	97.794
53	31273	0.313	98.107
54	27567	0.276	98.383
55	24111	0.241	98.624
56	20584	0.206	98.830
57	17742	0.177	99.007
58	15454	0.155	99.162
59	13264	0.133	99.294
60	11522	0.115	99.410
61	9671	0.097	99.506
62	8096	0.081	99.587
63	6906	0.069	99.656
64	5958	0.060	99.716
65	5014	0.050	99.766
66	4154	0.042	99.808
67	3526	0.035	99.843
68	2940	0.029	99.872
69	2385	0.024	99.896
70	1970	0.020	99.916
71	1679	0.017	99.933
72	1288	0.013	99.945
73	1129	0.011	99.957
74	819	0.008	99.965
75	683	0.007	99.972
76	588	0.006	99.978
77	456	0.005	99.982
78	372	0.004	99.986
79	303	0.003	99.989
80	243	0.002	99.991
81	189	0.002	99.993
82	155	0.002	99.995
83	119	0.001	99.996
84	88	0.001	99.997
85	76	0.001	99.998
86	63	0.001	99.998
87	48	0.000	99.999
88	24	0.000	99.999
89	24	0.000	99.999
90	16	0.000	99.999
91	10	0.000	100.000
92	9	0.000	100.000
93	8	0.000	100.000
94	9	0.000	100.000
95	1	0.000	100.000
96	6	0.000	100.000
97	3	0.000	100.000
98	5	0.000	100.000
99	3	0.000	100.000
101	2	0.000	100.000
102	1	0.000	100.000

2	27334	0.273	0.273
3	54834	0.548	0.822
4	81358	0.814	1.635
5	107922	1.079	2.714
6	132557	1.326	4.040
7	158515	1.585	5.625
8	180257	1.803	7.428
9	202796	2.028	9.456
10	223649	2.236	11.692
11	241607	2.416	14.108
12	259595	2.596	16.704
13	273415	2.734	19.438
14	286646	2.866	22.305
15	298267	2.983	25.288
16	307363	3.074	28.361
17	314125	3.141	31.502
18	318625	3.186	34.689
19	322681	3.227	37.915
20	322451	3.225	41.140
21	323319	3.233	44.373
22	320265	3.203	47.576
23	316232	3.162	50.738
24	310112	3.101	53.839
25	304371	3.044	56.883
26	295265	2.953	59.836
27	286654	2.867	62.702
28	276157	2.762	65.464
29	264280	2.643	68.107
30	253281	2.533	70.639
31	241538	2.415	73.055
32	228793	2.288	75.343
33	215242	2.152	77.495
34	203023	2.030	79.525
35	191590	1.916	81.441
36	178404	1.784	83.225
37	165173	1.652	84.877
38	153245	1.532	86.409
39	141480	1.415	87.824
40	130214	1.302	89.126
41	119925	1.199	90.326
42	109440	1.094	91.420
43	98480	0.985	92.405
44	89042	0.890	93.295
45	80897	0.809	94.104
46	72638	0.726	94.831
47	65104	0.651	95.482
48	58331	0.583	96.065
49	51661	0.517	96.582
50	45935	0.459	97.041
51	40836	0.408	97.449
52	35997	0.360	97.809
53	31435	0.314	98.124
54	27064	0.271	98.394
55	23818	0.238	98.632
56	20587	0.206	98.838
57	17828	0.178	99.017
58	15280	0.153	99.169
59	13207	0.132	99.301
60	11074	0.111	99.412
61	9615	0.096	99.508
62	8196	0.082	99.590
63	6907	0.069	99.659
64	5861	0.059	99.718
65	4894	0.049	99.767
66	4125	0.041	99.808
67	3455	0.035	99.843
68	2860	0.029	99.871
69	2395	0.024	99.895
70	1986	0.020	99.915
71	1652	0.017	99.932
72	1367	0.014	99.945
73	1070	0.011	99.956
74	857	0.009	99.965
75	714	0.007	99.972
76	603	0.006	99.978
77	482	0.005	99.983
78	377	0.004	99.986
79	301	0.003	99.989
80	227	0.002	99.992
81	188	0.002	99.993
82	152	0.002	99.995
83	98	0.001	99.996



84	85	0.001	99.997
85	76	0.001	99.998
86	66	0.001	99.998
87	46	0.000	99.999
88	35	0.000	99.999
89	25	0.000	99.999
90	17	0.000	99.999
91	10	0.000	100.000
92	11	0.000	100.000
93	10	0.000	100.000
94	8	0.000	100.000
95	5	0.000	100.000
96	2	0.000	100.000
97	2	0.000	100.000
98	1	0.000	100.000
99	1	0.000	100.000
100	2	0.000	100.000
102	1	0.000	100.000
103	1	0.000	100.000

Realistic distribution (1978), 5 simulation runs with  
#10<sup>7</sup> trials each.

#Size	count	Pct.Pr.	Cum.Prob.
2	27742	0.277	0.277
3	54677	0.547	0.824
4	82675	0.827	1.651
5	108463	1.085	2.736
6	134507	1.345	4.081
7	158561	1.586	5.666
8	182378	1.824	7.490
9	203721	2.037	9.527
10	225034	2.250	11.778
11	244493	2.445	14.223
12	260407	2.604	16.827
13	275619	2.756	19.583
14	288706	2.887	22.470
15	298802	2.988	25.458
16	308621	3.086	28.544
17	314602	3.146	31.690
18	320678	3.207	34.897
19	322287	3.223	38.120
20	325387	3.254	41.374
21	323649	3.236	44.610
22	320970	3.210	47.820
23	316689	3.167	50.987
24	311583	3.116	54.103
25	303370	3.034	57.136
26	295778	2.958	60.094
27	286367	2.864	62.958
28	276116	2.761	65.719
29	264823	2.648	68.367
30	253210	2.532	70.899
31	241216	2.412	73.311
32	228064	2.281	75.592
33	215406	2.154	77.746
34	202349	2.023	79.769
35	190374	1.904	81.673
36	176949	1.769	83.443
37	165151	1.652	85.094
38	151721	1.517	86.611
39	141166	1.412	88.023
40	129333	1.293	89.316
41	117985	1.180	90.496
42	108151	1.082	91.578
43	97506	0.975	92.553
44	88293	0.883	93.436
45	79806	0.798	94.234
46	71614	0.716	94.950
47	63819	0.638	95.588
48	56999	0.570	96.158
49	51237	0.512	96.671
50	45126	0.451	97.122
51	39647	0.396	97.518
52	34888	0.349	97.867
53	30939	0.309	98.177
54	26701	0.267	98.444
55	23100	0.231	98.675
56	20223	0.202	98.877
57	17368	0.174	99.050
58	14832	0.148	99.199
59	12917	0.129	99.328
60	10888	0.109	99.437
61	9355	0.094	99.530
62	8027	0.080	99.611
63	6712	0.067	99.678
64	5449	0.054	99.732
65	4683	0.047	99.779
66	4071	0.041	99.820
67	3300	0.033	99.853
68	2733	0.027	99.880
69	2228	0.022	99.902
70	1829	0.018	99.921
71	1574	0.016	99.936
72	1192	0.012	99.948
73	1001	0.010	99.958
74	840	0.008	99.967
75	697	0.007	99.974
76	546	0.005	99.979
77	451	0.005	99.984
78	347	0.003	99.987
79	277	0.003	99.990
80	237	0.002	99.992

81	176	0.002	99.994
82	132	0.001	99.995
83	107	0.001	99.996
84	72	0.001	99.997
85	59	0.001	99.998
86	54	0.001	99.998
87	29	0.000	99.999
88	36	0.000	99.999
89	17	0.000	99.999
90	18	0.000	99.999
91	14	0.000	99.999
92	11	0.000	100.000
93	9	0.000	100.000
94	12	0.000	100.000
95	6	0.000	100.000
96	9	0.000	100.000
97	2	0.000	100.000
98	3	0.000	100.000
102	1	0.000	100.000
115	1	0.000	100.000
2	27644	0.276	0.276
3	54820	0.548	0.825
4	82094	0.821	1.646
5	107908	1.079	2.725
6	134080	1.341	4.065
7	158457	1.585	5.650
8	182057	1.821	7.471
9	203799	2.038	9.509
10	225323	2.253	11.762
11	244094	2.441	14.203
12	260338	2.603	16.806
13	275313	2.753	19.559
14	289339	2.893	22.453
15	300128	3.001	25.454
16	309396	3.094	28.548
17	316055	3.161	31.708
18	320262	3.203	34.911
19	324558	3.246	38.157
20	324451	3.245	41.401
21	323165	3.232	44.633
22	320475	3.205	47.838
23	316869	3.169	51.006
24	310606	3.106	54.112
25	304363	3.044	57.156
26	296244	2.962	60.118
27	287374	2.874	62.992
28	275232	2.752	65.744
29	264925	2.649	68.394
30	253494	2.535	70.929
31	240393	2.404	73.333
32	227749	2.277	75.610
33	214887	2.149	77.759
34	203324	2.033	79.792
35	190055	1.901	81.693
36	176585	1.766	83.459
37	164249	1.642	85.101
38	152234	1.522	86.623
39	140079	1.401	88.024
40	128720	1.287	89.311
41	118319	1.183	90.495
42	107892	1.079	91.573
43	97400	0.974	92.547
44	88223	0.882	93.430
45	79416	0.794	94.224
46	71595	0.716	94.940
47	64278	0.643	95.583
48	57202	0.572	96.155
49	50296	0.503	96.658
50	45350	0.454	97.111
51	40020	0.400	97.511
52	34910	0.349	97.860
53	30929	0.309	98.170
54	26944	0.269	98.439
55	23118	0.231	98.670
56	20073	0.201	98.871
57	17369	0.174	99.045
58	15168	0.152	99.196
59	12868	0.129	99.325
60	10916	0.109	99.434
61	9344	0.093	99.528
62	7976	0.080	99.607
63	6753	0.068	99.675

64	5627	0.056	99.731
65	4754	0.048	99.779
66	3980	0.040	99.819
67	3385	0.034	99.852
68	2619	0.026	99.879
69	2359	0.024	99.902
70	1855	0.019	99.921
71	1547	0.015	99.936
72	1246	0.012	99.949
73	1015	0.010	99.959
74	856	0.009	99.967
75	625	0.006	99.974
76	534	0.005	99.979
77	416	0.004	99.983
78	349	0.003	99.987
79	274	0.003	99.989
80	223	0.002	99.992
81	175	0.002	99.993
82	166	0.002	99.995
83	96	0.001	99.996
84	86	0.001	99.997
85	80	0.001	99.998
86	58	0.001	99.998
87	39	0.000	99.999
88	34	0.000	99.999
89	27	0.000	99.999
90	26	0.000	99.999
91	16	0.000	100.000
92	7	0.000	100.000
93	8	0.000	100.000
94	7	0.000	100.000
95	5	0.000	100.000
96	2	0.000	100.000
97	1	0.000	100.000
98	1	0.000	100.000
100	3	0.000	100.000
101	1	0.000	100.000
102	1	0.000	100.000
2	27840	0.278	0.278
3	55177	0.552	0.830
4	82285	0.823	1.653
5	108797	1.088	2.741
6	134576	1.346	4.087
7	159079	1.591	5.678
8	181973	1.820	7.497
9	203810	2.038	9.535
10	225783	2.258	11.793
11	242440	2.424	14.218
12	260984	2.610	16.827
13	275199	2.752	19.579
14	289547	2.895	22.475
15	300347	3.003	25.478
16	308960	3.090	28.568
17	315455	3.155	31.723
18	320738	3.207	34.930
19	323379	3.234	38.164
20	323861	3.239	41.402
21	323727	3.237	44.640
22	322154	3.222	47.861
23	317092	3.171	51.032
24	310306	3.103	54.135
25	303598	3.036	57.171
26	295709	2.957	60.128
27	286138	2.861	62.990
28	275773	2.758	65.747
29	264151	2.642	68.389
30	252890	2.529	70.918
31	240646	2.406	73.324
32	228524	2.285	75.609
33	214869	2.149	77.758
34	202119	2.021	79.779
35	190407	1.904	81.683
36	177103	1.771	83.454
37	164143	1.641	85.096
38	152302	1.523	86.619
39	139993	1.400	88.019
40	128867	1.289	89.307
41	117893	1.179	90.486
42	107555	1.076	91.562
43	97700	0.977	92.539
44	88822	0.888	93.427
45	79354	0.794	94.221

46	71877	0.719	94.939
47	63978	0.640	95.579
48	57335	0.573	96.153
49	51230	0.512	96.665
50	45466	0.455	97.120
51	39989	0.400	97.519
52	35119	0.351	97.871
53	31038	0.310	98.181
54	26250	0.262	98.443
55	23199	0.232	98.675
56	20294	0.203	98.878
57	17282	0.173	99.051
58	15042	0.150	99.202
59	12912	0.129	99.331
60	11034	0.110	99.441
61	9278	0.093	99.534
62	7886	0.079	99.613
63	6600	0.066	99.679
64	5572	0.056	99.734
65	4693	0.047	99.781
66	3908	0.039	99.820
67	3318	0.033	99.854
68	2709	0.027	99.881
69	2255	0.023	99.903
70	1860	0.019	99.922
71	1504	0.015	99.937
72	1191	0.012	99.949
73	979	0.010	99.959
74	841	0.008	99.967
75	682	0.007	99.974
76	495	0.005	99.979
77	417	0.004	99.983
78	355	0.004	99.987
79	281	0.003	99.989
80	224	0.002	99.992
81	175	0.002	99.993
82	143	0.001	99.995
83	110	0.001	99.996
84	82	0.001	99.997
85	70	0.001	99.997
86	57	0.001	99.998
87	42	0.000	99.998
88	36	0.000	99.999
89	28	0.000	99.999
90	27	0.000	99.999
91	26	0.000	100.000
92	17	0.000	100.000
93	9	0.000	100.000
94	5	0.000	100.000
95	1	0.000	100.000
96	3	0.000	100.000
97	1	0.000	100.000
98	2	0.000	100.000
99	3	0.000	100.000
100	2	0.000	100.000
102	1	0.000	100.000
103	1	0.000	100.000
104	1	0.000	100.000
2	27553	0.276	0.276
3	55374	0.554	0.829
4	81958	0.820	1.649
5	108774	1.088	2.737
6	133933	1.339	4.076
7	158705	1.587	5.663
8	182547	1.825	7.488
9	204830	2.048	9.537
10	224602	2.246	11.783
11	244045	2.440	14.223
12	260007	2.600	16.823
13	276552	2.766	19.589
14	287450	2.875	22.463
15	298299	2.983	25.446
16	308517	3.085	28.531
17	315191	3.152	31.683
18	320840	3.208	34.892
19	323396	3.234	38.126
20	323646	3.236	41.362
21	322485	3.225	44.587
22	321905	3.219	47.806
23	316730	3.167	50.973
24	310812	3.108	54.082
25	304964	3.050	57.131

26	296672	2.967	60.098
27	286065	2.861	62.959
28	276076	2.761	65.719
29	264738	2.647	68.367
30	252812	2.528	70.895
31	241255	2.413	73.307
32	228778	2.288	75.595
33	214845	2.148	77.744
34	203309	2.033	79.777
35	189821	1.898	81.675
36	177123	1.771	83.446
37	164682	1.647	85.093
38	152307	1.523	86.616
39	140366	1.404	88.020
40	128964	1.290	89.309
41	117178	1.172	90.481
42	107495	1.075	91.556
43	97435	0.974	92.530
44	88175	0.882	93.412
45	79713	0.797	94.209
46	72090	0.721	94.930
47	64363	0.644	95.574
48	57026	0.570	96.144
49	51119	0.511	96.655
50	45099	0.451	97.106
51	40103	0.401	97.507
52	34896	0.349	97.856
53	30662	0.307	98.163
54	26616	0.266	98.429
55	23336	0.233	98.662
56	20096	0.201	98.863
57	17581	0.176	99.039
58	14997	0.150	99.189
59	13058	0.131	99.320
60	11134	0.111	99.431
61	9231	0.092	99.523
62	8058	0.081	99.604
63	6902	0.069	99.673
64	5662	0.057	99.730
65	4834	0.048	99.778
66	4040	0.040	99.818
67	3340	0.033	99.852
68	2785	0.028	99.880
69	2238	0.022	99.902
70	1789	0.018	99.920
71	1560	0.016	99.935
72	1242	0.012	99.948
73	1081	0.011	99.959
74	776	0.008	99.966
75	691	0.007	99.973
76	536	0.005	99.979
77	435	0.004	99.983
78	342	0.003	99.986
79	333	0.003	99.990
80	218	0.002	99.992
81	155	0.002	99.993
82	147	0.001	99.995
83	88	0.001	99.996
84	91	0.001	99.997
85	86	0.001	99.998
86	56	0.001	99.998
87	44	0.000	99.999
88	32	0.000	99.999
89	24	0.000	99.999
90	24	0.000	99.999
91	11	0.000	100.000
92	12	0.000	100.000
93	10	0.000	100.000
94	7	0.000	100.000
95	6	0.000	100.000
96	3	0.000	100.000
97	4	0.000	100.000
99	1	0.000	100.000
100	3	0.000	100.000
101	1	0.000	100.000
102	1	0.000	100.000
105	1	0.000	100.000
2	27694	0.277	0.277
3	54886	0.549	0.826
4	82176	0.822	1.648
5	109140	1.091	2.739
6	133348	1.333	4.072

7	159013	1.590	5.663
8	183031	1.830	7.493
9	204708	2.047	9.540
10	224936	2.249	11.789
11	243943	2.439	14.229
12	261431	2.614	16.843
13	276501	2.765	19.608
14	289240	2.892	22.500
15	298573	2.986	25.486
16	308412	3.084	28.570
17	315630	3.156	31.727
18	319931	3.199	34.926
19	323650	3.237	38.162
20	324345	3.243	41.406
21	323075	3.231	44.637
22	321742	3.217	47.854
23	316050	3.161	51.015
24	310615	3.106	54.121
25	304337	3.043	57.164
26	295062	2.951	60.115
27	286385	2.864	62.979
28	276627	2.766	65.745
29	265507	2.655	68.400
30	253180	2.532	70.932
31	240328	2.403	73.335
32	228626	2.286	75.621
33	215109	2.151	77.772
34	201521	2.015	79.788
35	188866	1.889	81.676
36	176841	1.768	83.445
37	164018	1.640	85.085
38	151984	1.520	86.605
39	140324	1.403	88.008
40	129515	1.295	89.303
41	118149	1.181	90.484
42	107525	1.075	91.560
43	97682	0.977	92.537
44	88734	0.887	93.424
45	80078	0.801	94.225
46	71605	0.716	94.941
47	64655	0.647	95.587
48	57291	0.573	96.160
49	50433	0.504	96.665
50	45046	0.450	97.115
51	39927	0.399	97.514
52	34820	0.348	97.862
53	30611	0.306	98.169
54	26878	0.269	98.437
55	23327	0.233	98.671
56	20326	0.203	98.874
57	17247	0.172	99.046
58	15010	0.150	99.196
59	12777	0.128	99.324
60	11072	0.111	99.435
61	9180	0.092	99.527
62	8056	0.081	99.607
63	6737	0.067	99.675
64	5687	0.057	99.732
65	4711	0.047	99.779
66	3979	0.040	99.818
67	3271	0.033	99.851
68	2760	0.028	99.879
69	2242	0.022	99.901
70	1927	0.019	99.920
71	1511	0.015	99.936
72	1254	0.013	99.948
73	1099	0.011	99.959
74	822	0.008	99.967
75	661	0.007	99.974
76	527	0.005	99.979
77	437	0.004	99.984
78	368	0.004	99.987
79	254	0.003	99.990
80	227	0.002	99.992
81	173	0.002	99.994
82	143	0.001	99.995
83	113	0.001	99.996
84	78	0.001	99.997
85	65	0.001	99.998
86	57	0.001	99.998
87	41	0.000	99.999
88	32	0.000	99.999

89	28	0.000	99.999
90	16	0.000	99.999
91	14	0.000	100.000
92	10	0.000	100.000
93	3	0.000	100.000
94	5	0.000	100.000
95	6	0.000	100.000
96	1	0.000	100.000
97	5	0.000	100.000
99	1	0.000	100.000
100	1	0.000	100.000
101	2	0.000	100.000
102	2	0.000	100.000
105	1	0.000	100.000