



# 2023 WMA RULEBOOK APPENDIX B

## **SCORING OF WMA COMBINED EVENTS**

**AGE GRADING TABLES AND PARAMETERS** 

The scoring of Master's Combined Events competitions is as follows. In all events the scoring procedure is exactly like normal IAAF Combined Events scoring with the addition of one additional step. That additional step is that the actual performance in each event is multiplied by the appropriate Age Factor to arrive at an Age Factored Performance. This Age Factored Performance (AFP) is then looked up in the current IAAF Combined Events Scoring Tables in the normal manner.

Age Factors: The Age Factors to be used for each gender and age group are listed below. Use the full, four place number for Age Factoring. Round the result of the multiplication as shown below. **Note**: The Age Factors automatically correct for the reduced WMA implements and distances. So a M65-69 man throwing a 5 kilogram shot can be looked up in the standard IAAF scoring table for the 7.26 kilogram shot put, after multiplying the actual performance by the Age Factor, because the Age Factor takes into account the fact that he is throwing a smaller shot. The same is true with a W60-64 woman running 80 meter hurdles, .762 meter high. The Age Factor automatically produces an Age Factored Performance that can be looked up in the standard IAAF 100 meter, .840 high, women's hurdle table.

**Rounding:** The general rule is that rounding is done so as to never give artificial aid to the performer. So, after multiplying the Actual Performance by the Age Factor, be sure to round all running events up to the higher one hundredth of a second and round all throwing and jumping events down to the shorter centimetre. Remember: Run up, Jump and Throw down.

#### Example:

M50-54 man runs a 13.12 second Actual Performance in the 100 meter event.

13.12 times .9031 Age Factor equals an Age Factored Performance of 11.848672

11. 848672 rounded up equals 11.85 to look up in the standard IAAF Combined Events Scoring Table.

11.85 is awarded 681 points.

#### Example:

W35-39 woman jumps a 1.47 meter Actual Performance in the High Jump.

1.47 times the 1.0205 Age Factor equals a 1.500135 Age Factored Performance.

1.500135 rounded down equals 1.50 to look up in the standard IAAF Combined Events Scoring Table.

1.50 is awarded 621 points.

**Scoring Tables:** The scoring tables to use are the current edition of the "IAAF Scoring Tables for Combined Events". (See below for the formulas that describe the scoring in the tables) If a performance is being scored that does not appear in the tables, be sure to move to the performance that results in less points being scored, not more.

#### Example:

Looking up a male 66.06 second 400 meter, the 66.09 score must be used, not the 66.05 score.

66.06 is closer to 66.05 than it is to 66.09 but is faster than was actually ran.

66.06 therefore is awarded 230 points.

#### Example:

Looking up a female 12.35 meter shot put, the 12.34 score must be used, not the 12.36 score.

12.35 is equally close to 12.36, but 12.36 is further than was actually thrown.

12.34 therefore is awarded 684 points.

**Hand Timing:** If Combined Events running events, from 400 meters down (including hurdles), are hand timed, the times must be corrected before multiplying by the appropriate Age Factor. Then the score must be looked up in the fully automatic portion of the scoring tables (Note: The hand timed portions of the scoring tables are never used in Masters Combined Events scoring).

#### **Hand Timing Corrections:**

The IAAF corrections to apply are:

50 through 300 meters add 0.24 seconds to the hand time 400 meters add 0.14 seconds to the hand time

Longer than 400 meters add nothing

(use auto or hand time as is)

#### **IAAF Combined Events Scoring Formulas:**

The official IAAF scoring tables, as published in the "IAAF Scoring Tables for Combined Events", are generated by the following mathematical formulas. The results of the formulas must be truncated to the integer and not rounded up. So, a formula result of 674.999 is 674 points, not 675, and 872.001 is 872. The actual points formulas are as follows, with the

three constants listed below for all of the Combined Events. Note that performances must be expressed in seconds, centimetres, or meters, as indicated.

For a given performance, the point score (P) is calculated using one of the following equations:

Track Events: P = a \*(b - T)\*\*c (where T is Time in seconds

Jumps:  $P = a^{*}(M-b)^{**}c$  (where M is Measurement in centimetres)

Throws: P = a\*(D-b)\*\*c (where D is Distance in meters)

#### **Parameters**

MEN			
60 m	a=58.015	b=11.5s	c=1.81
100m	a=25.4347	b=18s	c=1.81
200m	a=5.8425	b=38s	c=1.81
400m	a=1.53775	b=82s	c=1.81
1000m	a=.08713	b=305.5s	c=1.85
1500m	a=.03768	b=480s	c=1.85
60m Hurdles	a=20.5173	b=15.5s	c=1.92
110m Hurdles	a=5.74352	b=28.5s	c=1.92
High Jump	a=.8465	b=75cm	c=1.42
Pole Vault	a=.2797	b=100cm	c=1.35
Long Jump	a=.14354	b=220cm	c=1.40
Shot Put	a=51.39	b=1.5m	c=1.05
Discus	a=12.91	b=4m	c=1.10
Hammer	a=13.0941	b=5.5m	c=1.05
Javelin	a=10.14	b=7m	c=1.08
Weight	a=47.8338	b=1.5m	c=1.05

WOMEN			
60 m	a=46.0849	b=13s	c=1.81
100m	a=17.857	b=21s	c=1.81
200m	a=4.99087	b=42.5s	c=1.81
400m	a=1.34285	b=91.7s	c=1.81
800m	a=.11193	b=254s	c=1.88
60m Hurdles	a=20.0479	b=17s	c=1.835
100m Hurdles	a=9.23076	b=26.7s	c=1.835
High Jump	a=1.84523	b=75cm	c=1.348
Pole Vault	a=.44125	b=100	c=1.35
Long Jump	a=.188807	b=210cm	c=1.41
Shot Put	a=56.0211	b=1.5m	c=1.05
Discus	a=12.3311	b=3m	c=1.10
Hammer	a=13.3174	b=5m	c=1.05
Javelin	a=15.9803	b=3.8m	c=1.04
Weight	a=44.2593	b=1.5m	c=1.05

<sup>\*</sup> means multiplied by and \*\* means raised to the power of

a, b, and c are parameters whose values are listed below.

#### **2023 WOMEN'S COMBINED EVENTS AGE FACTORS**

Age	60m	100m	200m	400m	800m	1000m	1500m	60m Hurdles	Short Hurdles
35	1.0000	1.0000	1.0000	0.9783	0.9929	0.9995	0.9812	1.0000	0.9932
40	0.9985	0.9810	0.9787	0.9441	0.9563	0.9624	0.9441	0.9288	1.1368
45	0.9613	0.9441	0.9411	0.9084	0.9192	0.9248	0.9069	0.8980	1.0971
50	0.9259	0.9080	0.9040	0.8711	0.8814	0.8869	0.8697	0.8861	1.0597
55	0.8922	0.8726	0.8673	0.8324	0.8432	0.8485	0.8324	0.8530	1.0188
60	0.8603	0.8379	0.8309	0.7924	0.8044	0.8098	0.7951	0.8192	0.9774
65	0.8300	0.8038	0.7950	0.7510	0.7651	0.7706	0.7576	0.7847	0.9355
70	0.8014	0.7705	0.7594	0.7084	0.7254	0.7312	0.7202	0.7438	0.8862
75	0.7743	0.7377	0.7242	0.6647	0.6848	0.6906	0.6812	0.6926	0.8249
80	0.7427	0.7040	0.6875	0.6148	0.6354	0.6407	0.6316	0.6311	0.7515
85	0.6977	0.6590	0.6374	0.5556	0.5746	0.5790	0.5698	0.5594	0.6661
90	0.6393	0.6011	0.5723	0.4869	0.5024	0.5056	0.4960	0.4776	0.5686
95	0.5673	0.5302	0.4920	0.4090	0.4188	0.4205	0.4102	0.3855	0.4592
100	0.4818	0.4464	0.3965	0.3219	0.3239	0.3237	0.3122	0.2834	0.3379
105	0.3827	0.3497	0.2858	0.2255	0.2176	0.2151	0.2021	0.1711	0.2046
110	0.2700	0.2400	0.1600	0.1200	0.1000	0.0943	0.0800	0.0487	0.0594

Age	High Jump	Pole Vault	Long Jump	Shot Put	Discus	Hammer	Javelin	Weight
35	1.0205	1.0024	1.0323	1.0368	1.0000	1.0573	1.0236	1.0355
40	1.0715	1.0637	1.0905	1.1164	1.0733	1.1616	1.1298	1.1186
45	1.1255	1.1306	1.1537	1.2062	1.1772	1.2787	1.2495	1.2126
50	1.1826	1.2037	1.2226	1.1330	1.2949	1.2225	1.2650	1.1544
55	1.2430	1.2840	1.2982	1.2347	1.4300	1.3551	1.4077	1.2633
60	1.3071	1.3728	1.3814	1.3534	1.5873	1.5099	1.5732	1.1715
65	1.3751	1.4715	1.4736	1.4938	1.7735	1.6940	1.7680	1.3004
70	1.4473	1.5819	1.5764	1.6631	1.9985	1.9176	2.0006	1.4577
75	1.5242	1.7128	1.6928	1.5282	1.9717	1.6730	2.0428	1.3741
80	1.6061	1.8944	1.8499	1.7433	2.2786	1.9458	2.3589	1.5846
85	1.7029	2.1559	2.0771	2.0244	2.6843	2.3110	2.7698	1.8666
90	1.8509	2.5533	2.4193	2.4079	3.2477	2.8273	3.3387	2.2647
95	2.0785	3.2130	2.9746	2.9631	4.0861	3.6161	4.1830	2.8706
100	2.4406	4.4938	4.0010	3.8399	5.4702	4.9754	5.5753	3.9056
105	3.0671	7.9701	6.4700	5.1792	8.2642	7.6645	8.3220	5.9984
110	4.3478	50.0000	20.0000	7.0711	17.3205	13.1951	16.3299	12.2297

## **2023 MEN'S COMBINED EVENTS AGE FACTORS**

Age	60m	100m	200m	400m	800m	1000m	1500m	60m Hurdles	Short Hurdles
35	0.9991	0.9999	0.9791	0.9824	0.9965	0.9997	0.9849	1.0000	0.9957
40	0.9763	0.9668	0.9482	0.9513	0.9580	0.9629	0.9532	0.9698	0.9609
45	0.9526	0.9345	0.9179	0.9208	0.9205	0.9266	0.9206	0.9371	0.9244
50	0.9281	0.9031	0.8883	0.8909	0.8842	0.8908	0.8871	0.9132	0.9662
55	0.9029	0.8726	0.8594	0.8616	0.8489	0.8556	0.8527	0.8782	0.9230
60	0.8769	0.8429	0.8312	0.8329	0.8147	0.8208	0.8174	0.8732	0.9457
65	0.8502	0.8139	0.8035	0.8047	0.7814	0.7865	0.7814	0.8351	0.8958
70	0.8228	0.7858	0.7764	0.7770	0.7490	0.7527	0.7446	0.8174	1.0788
75	0.7946	0.7584	0.7500	0.7440	0.7169	0.7188	0.7070	0.7765	1.0111
80	0.7658	0.7317	0.7170	0.6970	0.6737	0.6756	0.6651	0.7249	0.9392
85	0.7264	0.6946	0.6669	0.6360	0.6156	0.6173	0.6076	0.6560	0.8483
90	0.6696	0.6396	0.5998	0.5609	0.5425	0.5436	0.5341	0.5699	0.7360
95	0.5956	0.5666	0.5156	0.4718	0.4544	0.4545	0.4446	0.4666	0.6025
100	0.5043	0.4757	0.4142	0.3686	0.3514	0.3500	0.3390	0.3461	0.4477
105	0.3958	0.3669	0.2957	0.2514	0.2332	0.2300	0.2175	0.2085	0.2719
110	0.2700	0.2400	0.1600	0.1200	0.1000	0.0939	0.0800	0.0538	0.0750

Age	High Jump	Pole Vault	Long Jump	Shot Put	Discus	Hammer	Javelin	Weight
35	1.0136	1.0129	1.0385	1.0462	1.0000	1.0000	1.0438	1.0000
40	1.0631	1.0708	1.0972	1.1125	1.0187	1.0496	1.1218	1.0668
45	1.1159	1.1351	1.1608	1.1867	1.0856	1.1190	1.2110	1.1405
50	1.1724	1.2070	1.2299	1.1551	1.0078	1.0911	1.2293	0.9978
55	1.2330	1.2881	1.3051	1.2420	1.0873	1.1783	1.3425	1.0704
60	1.2981	1.3800	1.3876	1.2252	0.9653	1.1709	1.3675	1.0071
65	1.3683	1.4854	1.4783	1.3317	1.0590	1.2865	1.5184	1.0854
70	1.4442	1.6073	1.5787	1.3036	1.1746	1.2785	1.5566	1.0263
75	1.5267	1.7502	1.6917	1.4385	1.3205	1.4403	1.7731	1.1233
80	1.6166	1.9199	1.8448	1.3885	1.5103	1.4301	1.8402	1.0544
85	1.7149	2.1548	2.0674	1.5671	1.7672	1.6779	2.1894	1.2044
90	1.8493	2.5212	2.4042	1.7971	2.1341	2.0327	2.6989	1.4230
95	2.0563	3.1395	2.9522	2.1043	2.7000	2.5823	3.4861	1.7680
100	2.3825	4.3531	3.9676	2.5361	3.6863	3.5446	4.7841	2.3883
105	2.9328	7.6795	6.4179	3.1876	5.8353	5.5959	7.2999	3.8185
110	4.0000	50.0000	20.0000	4.2841	14.1421	12.8565	14.1421	10.5283

Age	60m	100m	200m	400m	800m	1000m	1500m	Mile	3000m	5000m	10000m
30	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
31	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
32	1.0000	1.0000	1.0000	0.9980	1.0000	1.0000	1.0000	0.9947	1.0000	1.0000	1.0000
33	1.0000	1.0000	1.0000	0.9915	1.0000	1.0000	0.9960	0.9883	1.0000	1.0000	1.0000
34	1.0000	1.0000	1.0000	0.9849	1.0000	1.0000	0.9886	0.9819	1.0000	1.0000	0.9937
35	1.0000	1.0000	1.0000	0.9783	0.9929	0.9995	0.9812	0.9754	1.0000	0.9974	0.9869
36	1.0000	1.0000	1.0000	0.9716	0.9857	0.9921	0.9738	0.9689	1.0000	0.9904	0.9801
37	1.0000	1.0000	1.0000	0.9648	0.9784	0.9847	0.9664	0.9623	1.0000	0.9833	0.9731
38	1.0000	0.9960	0.9939	0.9580	0.9710	0.9773	0.9590	0.9557	0.9930	0.9761	0.9661
39	1.0000	0.9885	0.9863	0.9511	0.9637	0.9698	0.9515	0.9491	0.9849	0.9689	0.9591
40	0.9985	0.9810	0.9787	0.9441	0.9563	0.9624	0.9441	0.9424	0.9767	0.9615	0.9519
41	0.9909	0.9735	0.9712	0.9371	0.9490	0.9549	0.9367	0.9357	0.9685	0.9541	0.9447
42	0.9834	0.9661	0.9636	0.9300	0.9415	0.9474	0.9293	0.9290	0.9603	0.9467	0.9374
43	0.9760	0.9588	0.9561	0.9229	0.9341	0.9399	0.9218	0.9222	0.9521	0.9392	0.9301
44	0.9686	0.9514	0.9486	0.9157	0.9267	0.9324	0.9144	0.9154	0.9438	0.9316	0.9227
45	0.9613	0.9441	0.9411	0.9084	0.9192	0.9248	0.9069	0.9085	0.9355	0.9239	0.9152
46	0.9541	0.9368	0.9337	0.9011	0.9117	0.9173	0.8995	0.9016	0.9271	0.9162	0.9077
47	0.9469	0.9295	0.9262	0.8937	0.9041	0.9097	0.8921	0.8947	0.9188	0.9084	0.9001
48	0.9398	0.9223	0.9188	0.8862	0.8966	0.9021	0.8846	0.8877	0.9104	0.9006	0.8925
49	0.9328	0.9151	0.9114	0.8787	0.8890	0.8945	0.8772	0.8807	0.9019	0.8926	0.8848
50	0.9259	0.9080	0.9040	0.8711	0.8814	0.8869	0.8697	0.8737	0.8935	0.8847	0.8770
51	0.9190	0.9008	0.8966	0.8635	0.8738	0.8792	0.8623	0.8666	0.8850	0.8766	0.8692
52	0.9122	0.8937	0.8893	0.8558	0.8662	0.8716	0.8548	0.8595	0.8765	0.8685	0.8613
53	0.9055	0.8866	0.8819	0.8481	0.8585	0.8639	0.8473	0.8524	0.8680	0.8603	0.8533
54	0.8988	0.8796	0.8746	0.8403	0.8509	0.8562	0.8399	0.8452	0.8594	0.8521	0.8453
55	0.8922	0.8726	0.8673	0.8324	0.8432	0.8485	0.8324	0.8380	0.8509	0.8438	0.8373
56	0.8857	0.8656	0.8600	0.8245	0.8355	0.8408	0.8249	0.8308	0.8423	0.8355	0.8291
57	0.8793	0.8586	0.8527	0.8166	0.8277	0.8330	0.8175	0.8235	0.8336	0.8271	0.8210
58	0.8729	0.8517	0.8454	0.8086	0.8200	0.8253	0.8100	0.8162	0.8250	0.8186	0.8127
59	0.8666	0.8447	0.8382	0.8005	0.8122	0.8175	0.8025	0.8089	0.8163	0.8101	0.8045
60	0.8603	0.8379	0.8309	0.7924	0.8044	0.8098	0.7951	0.8015	0.8076	0.8015	0.7961
61	0.8541	0.8310	0.8237	0.7842	0.7966	0.8020	0.7876	0.7941	0.7989	0.7929	0.7877
62	0.8480	0.8242	0.8165	0.7760	0.7888	0.7942	0.7801	0.7867	0.7901	0.7842	0.7793
63	0.8420	0.8174	0.8093	0.7677	0.7809	0.7863	0.7726	0.7792	0.7813	0.7755	0.7708
64	0.8360	0.8106	0.8022	0.7594	0.7730	0.7785	0.7651	0.7717	0.7725	0.7667	0.7623
65	0.8300	0.8038	0.7950	0.7510	0.7651	0.7706	0.7576	0.7642	0.7637	0.7578	0.7537
66	0.8242	0.7971	0.7879	0.7426	0.7572	0.7628	0.7501	0.7566	0.7549	0.7489	0.7450
67	0.8184	0.7904	0.7807	0.7341	0.7493	0.7549	0.7427	0.7490	0.7460	0.7399	0.7363
68	0.8127	0.7838	0.7736	0.7256	0.7414	0.7470	0.7352	0.7414	0.7371	0.7309	0.7276
69	0.8070	0.7771	0.7665	0.7171	0.7334	0.7391	0.7277	0.7338	0.7282	0.7219	0.7188
70	0.8014	0.7705	0.7594	0.7084	0.7254	0.7312	0.7202	0.7261	0.7193	0.7128	0.7100

Age	60m	100m	200m	400m	800m	1000m	1500m	Mile	3000m	5000m	10000m
71	0.7958	0.7639	0.7524	0.6998	0.7174	0.7232	0.7127	0.7184	0.7103	0.7036	0.7011
72	0.7903	0.7573	0.7453	0.6911	0.7094	0.7153	0.7052	0.7107	0.7013	0.6944	0.6922
73	0.7849	0.7508	0.7382	0.6823	0.7014	0.7073	0.6976	0.7025	0.6923	0.6851	0.6832
74	0.7796	0.7442	0.7312	0.6735	0.6933	0.6992	0.6897	0.6938	0.6833	0.6758	0.6742
75	0.7743	0.7377	0.7242	0.6647	0.6848	0.6906	0.6812	0.6847	0.6743	0.6665	0.6651
76	0.7690	0.7313	0.7172	0.6555	0.6758	0.6816	0.6722	0.6752	0.6652	0.6571	0.6560
77	0.7632	0.7248	0.7102	0.6459	0.6664	0.6720	0.6628	0.6652	0.6561	0.6476	0.6468
78	0.7569	0.7184	0.7032	0.6359	0.6565	0.6620	0.6529	0.6547	0.6470	0.6381	0.6376
79	0.7501	0.7114	0.6956	0.6255	0.6462	0.6516	0.6425	0.6438	0.6379	0.6286	0.6284
80	0.7427	0.7040	0.6875	0.6148	0.6354	0.6407	0.6316	0.6324	0.6288	0.6190	0.6191
81	0.7348	0.6960	0.6787	0.6037	0.6241	0.6292	0.6202	0.6205	0.6196	0.6094	0.6098
82	0.7263	0.6875	0.6693	0.5922	0.6124	0.6174	0.6083	0.6082	0.6098	0.5997	0.6004
83	0.7173	0.6785	0.6593	0.5804	0.6003	0.6051	0.5960	0.5955	0.5993	0.5893	0.5903
84	0.7078	0.6690	0.6486	0.5682	0.5876	0.5922	0.5832	0.5823	0.5881	0.5783	0.5795
85	0.6977	0.6590	0.6374	0.5556	0.5746	0.5790	0.5698	0.5686	0.5762	0.5665	0.5679
86	0.6871	0.6484	0.6256	0.5426	0.5610	0.5652	0.5561	0.5545	0.5637	0.5541	0.5556
87	0.6759	0.6373	0.6132	0.5292	0.5471	0.5510	0.5418	0.5399	0.5505	0.5410	0.5425
88	0.6643	0.6258	0.6002	0.5155	0.5326	0.5363	0.5270	0.5249	0.5366	0.5272	0.5287
89	0.6520	0.6137	0.5865	0.5014	0.5177	0.5212	0.5118	0.5094	0.5220	0.5127	0.5142
90	0.6393	0.6011	0.5723	0.4869	0.5024	0.5056	0.4960	0.4935	0.5067	0.4975	0.4990
91	0.6260	0.5879	0.5574	0.4721	0.4866	0.4895	0.4798	0.4771	0.4908	0.4816	0.4830
92	0.6121	0.5743	0.5420	0.4569	0.4703	0.4729	0.4631	0.4603	0.4742	0.4650	0.4662
93	0.5977	0.5601	0.5259	0.4413	0.4536	0.4559	0.4460	0.4430	0.4569	0.4478	0.4488
94	0.5828	0.5454	0.5092	0.4254	0.4364	0.4384	0.4283	0.4253	0.4390	0.4299	0.4306
95	0.5673	0.5302	0.4920	0.4090	0.4188	0.4205	0.4102	0.4071	0.4204	0.4112	0.4116
96	0.5513	0.5145	0.4741	0.3923	0.4007	0.4020	0.3915	0.3884	0.4010	0.3919	0.3920
97	0.5348	0.4983	0.4556	0.3753	0.3822	0.3831	0.3724	0.3693	0.3811	0.3719	0.3716
98	0.5177	0.4815	0.4365	0.3579	0.3632	0.3638	0.3528	0.3498	0.3604	0.3513	0.3505
99	0.5000	0.4642	0.4168	0.3400	0.3438	0.3440	0.3327	0.3298	0.3391	0.3299	0.3286
100	0.4818	0.4464	0.3965	0.3219	0.3239	0.3237	0.3122	0.3093	0.3171	0.3079	0.3060
101	0.4631	0.4281	0.3756	0.3033	0.3035	0.3029	0.2911	0.2884	0.2944	0.2852	0.2827
102	0.4438	0.4093	0.3541	0.2844	0.2827	0.2816	0.2696	0.2671	0.2711	0.2618	0.2586
103	0.4240	0.3900	0.3319	0.2652	0.2615	0.2599	0.2476	0.2453	0.2470	0.2377	0.2339
104	0.4036	0.3701	0.3092	0.2455	0.2398	0.2377	0.2251	0.2230	0.2223	0.2129	0.2084
105	0.3827	0.3497	0.2858	0.2255	0.2176	0.2151	0.2021	0.2003	0.1970	0.1875	0.1821
106	0.3613	0.3288	0.2619	0.2051	0.1950	0.1919	0.1787	0.1771	0.1709	0.1613	0.1551
107	0.3393	0.3074	0.2373	0.1844	0.1719	0.1683	0.1547	0.1535	0.1442	0.1345	0.1275
108	0.3167	0.2854	0.2122	0.1633	0.1484	0.1442	0.1303	0.1295	0.1168	0.1070	0.0990
109	0.2936	0.2630	0.1864	0.1418	0.1244	0.1195	0.1054	0.1050	0.0887	0.0788	0.0699
110	0.2700	0.2400	0.1600	0.1200	0.1000	0.0943	0.0800	0.0800	0.0600	0.0500	0.0400

Age	60m Hurdles	Short Hurdles	Long Hurdles	Steeple Chase	High Jump	Pole Vault	Long Jump	Triple Jump	Shot Put	Discus	Hammer
30	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
31	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
32	1.0000	1.0000	0.9968	0.9932	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
33	1.0000	1.0000	0.9899	0.9839	1.0008	1.0000	1.0103	1.0000	1.0073	1.0000	1.0187
34	1.0000	0.9997	0.9830	0.9747	1.0106	1.0000	1.0212	1.0000	1.0219	1.0000	1.0378
35	1.0000	0.9932	0.9760	0.9655	1.0205	1.0024	1.0323	1.0039	1.0368	1.0000	1.0573
36	0.9999	0.9866	0.9691	0.9564	1.0305	1.0143	1.0436	1.0167	1.0520	1.0000	1.0773
37	0.9937	0.9800	0.9622	0.9473	1.0406	1.0263	1.0550	1.0297	1.0675	1.0166	1.0977
38	0.9874	0.9734	0.9553	0.9383	1.0508	1.0386	1.0666	1.0429	1.0835	1.0351	1.1185
39	0.9811	0.9668	0.9484	0.9293	1.0611	1.0511	1.0784	1.0562	1.0998	1.0540	1.1398
40	0.9288	1.1368	0.9414	0.9203	1.0715	1.0637	1.0905	1.0698	1.1164	1.0733	1.1616
41	0.9227	1.1289	0.9345	0.9115	1.0821	1.0766	1.1027	1.0836	1.1335	1.0931	1.1839
42	0.9166	1.1210	0.9276	0.9026	1.0928	1.0898	1.1151	1.0975	1.1510	1.1134	1.2067
43	0.9105	1.1131	0.9207	0.8938	1.1036	1.1031	1.1277	1.1117	1.1689	1.1341	1.2301
44	0.9043	1.1051	0.9137	0.8851	1.1145	1.1167	1.1406	1.1261	1.1873	1.1554	1.2541
45	0.8980	1.0971	0.9068	0.8764	1.1255	1.1306	1.1537	1.1407	1.2062	1.1772	1.2787
46	0.8918	1.0891	0.8999	0.8678	1.1367	1.1447	1.1670	1.1556	1.2255	1.1995	1.3039
47	0.8855	1.0811	0.8930	0.8592	1.1480	1.1590	1.1805	1.1706	1.2454	1.2224	1.3298
48	0.8792	1.0730	0.8861	0.8506	1.1594	1.1736	1.1943	1.1859	1.2657	1.2459	1.3563
49	0.8728	1.0649	0.8791	0.8421	1.1709	1.1885	1.2083	1.2015	1.2867	1.2701	1.3836
50	0.8861	1.0597	1.1635	0.8336	1.1826	1.2037	1.2226	1.2172	1.1330	1.2949	1.2225
51	0.8795	1.0516	1.1543	0.8252	1.1944	1.2191	1.2372	1.2333	1.1522	1.3204	1.2475
52	0.8729	1.0434	1.1451	0.8169	1.2063	1.2349	1.2520	1.2496	1.1719	1.3466	1.2732
53	0.8663	1.0352	1.1358	0.8085	1.2184	1.2510	1.2671	1.2661	1.1922	1.3736	1.2997
54	0.8596	1.0270	1.1266	0.8002	1.2307	1.2673	1.2825	1.2829	1.2131	1.4014	1.3270
55	0.8530	1.0188	1.1174	0.7920	1.2430	1.2840	1.2982	1.3000	1.2347	1.4300	1.3551
56	0.8463	1.0106	1.1081	0.7838	1.2555	1.3011	1.3142	1.3173	1.2570	1.4595	1.3841
57	0.8395	1.0023	1.0989	0.7756	1.2682	1.3185	1.3305	1.3350	1.2799	1.4899	1.4140
58	0.8328	0.9940	1.0897	0.7675	1.2810	1.3362	1.3471	1.3529	1.3036	1.5213	1.4449
59	0.8260	0.9857	1.0804	0.7594	1.2940	1.3543	1.3641	1.3711	1.3281	1.5538	1.4769
60	0.8192	0.9774	1.0712	0.7514	1.3071	1.3728	1.3814	1.3896	1.3534	1.5873	1.5099
61	0.8123	0.9691	1.0620	0.7434	1.3203	1.3917	1.3991	1.4085	1.3795	1.6220	1.5441
62	0.8055	0.9607	1.0527	0.7354	1.3338	1.4110	1.4171	1.4276	1.4066	1.6579	1.5796
63	0.7986	0.9523	1.0435	0.7272	1.3474	1.4307	1.4356	1.4471	1.4346	1.6950	1.6163
64	0.7916	0.9439	1.0343	0.7188	1.3611	1.4509	1.4544	1.4670	1.4637	1.7336	1.6544
65	0.7847	0.9355	1.0250	0.7100	1.3751	1.4715	1.4736	1.4871	1.4938	1.7735	1.6940
66	0.7773	0.9266	1.0158	0.7011	1.3891	1.4926	1.4933	1.5076	1.5251	1.8151	1.7352
67	0.7696	0.9173	1.0066	0.6918	1.4034	1.5142	1.5134	1.5285	1.5576	1.8582	1.7780
68	0.7614	0.9074	0.9973	0.6824	1.4179	1.5362	1.5339	1.5498	1.5914	1.9031	1.8226
69	0.7528	0.8971	0.9881	0.6726	1.4325	1.5588	1.5549	1.5714	1.6265	1.9498	1.8691
70	0.7438	0.8862	1.5178	0.6626	1.4473	1.5819	1.5764	1.5934	1.6631	1.9985	1.9176

Age	60m Hurdles	Short Hurdles	Long Hurdles	Steeple Chase	High Jump	Pole Vault	Long Jump	Triple Jump	Shot Put	Discus	Hammer
71	0.7344	0.8749	1.5015	0.6524	1.4623	1.6056	1.5984	1.6158	1.7013	2.0493	1.9683
72	0.7245	0.8631	1.4843	0.6419	1.4775	1.6299	1.6209	1.6387	1.7411	2.1023	2.0213
73	0.7143	0.8509	1.4660	0.6311	1.4928	1.6557	1.6439	1.6619	1.7827	2.1578	2.0768
74	0.7036	0.8381	1.4468	0.6201	1.5084	1.6833	1.6675	1.6856	1.8261	2.2159	2.1350
75	0.6926	0.8249	1.4266	0.6088	1.5242	1.7128	1.6928	1.7097	1.5282	1.9717	1.6730
76	0.6811	0.8112	1.4054	0.5973	1.5401	1.7443	1.7200	1.7357	1.5671	2.0270	1.7219
77	0.6692	0.7970	1.3833	0.5855	1.5563	1.7780	1.7491	1.7636	1.6079	2.0851	1.7735
78	0.6569	0.7823	1.3601	0.5735	1.5727	1.8141	1.7803	1.7936	1.6508	2.1462	1.8278
79	0.6442	0.7671	1.3360	0.5612	1.5893	1.8528	1.8139	1.8260	1.6958	2.2106	1.8851
80	0.6311	0.7515	1.3109	0.5486	1.6061	1.8944	1.8499	1.8608	1.7433	2.2786	1.9458
81	0.6176	0.7353	1.2849	0.5358	1.6232	1.9390	1.8888	1.8983	1.7934	2.3504	2.0101
82	0.6037	0.7187	1.2578	0.5227	1.6404	1.9871	1.9305	1.9388	1.8463	2.4265	2.0783
83	0.5893	0.7017	1.2298	0.5094	1.6594	2.0390	1.9756	1.9826	1.9022	2.5072	2.1509
84	0.5746	0.6841	1.2008	0.4958	1.6802	2.0951	2.0244	2.0300	1.9615	2.5929	2.2283
85	0.5594	0.6661	1.1708	0.4819	1.7029	2.1559	2.0771	2.0813	2.0244	2.6843	2.3110
86	0.5439	0.6475	1.1399	0.4678	1.7277	2.2219	2.1343	2.1370	2.0914	2.7817	2.3996
87	0.5279	0.6285	1.1080	0.4534	1.7547	2.2938	2.1964	2.1977	2.1627	2.8860	2.4946
88	0.5115	0.6090	1.0750	0.4388	1.7841	2.3724	2.2642	2.2639	2.2389	2.9978	2.5970
89	0.4948	0.5891	1.0412	0.4239	1.8161	2.4585	2.3382	2.3363	2.3204	3.1181	2.7076
90	0.4776	0.5686	1.0063	0.4087	1.8509	2.5533	2.4193	2.4157	2.4079	3.2477	2.8273
91	0.4600	0.5477	0.9704	0.3933	1.8889	2.6579	2.5086	2.5031	2.5021	3.3879	2.9575
92	0.4420	0.5263	0.9336	0.3776	1.9302	2.7741	2.6071	2.5998	2.6037	3.5401	3.0996
93	0.4236	0.5044	0.8958	0.3617	1.9753	2.9036	2.7164	2.7070	2.7136	3.7059	3.2553
94	0.4048	0.4821	0.8570	0.3454	2.0246	3.0489	2.8382	2.8266	2.8330	3.8871	3.4266
95	0.3855	0.4592	0.8173	0.3290	2.0785	3.2130	2.9746	2.9606	2.9631	4.0861	3.6161
96	0.3659	0.4359	0.7765	0.3122	2.1376	3.3995	3.1283	3.1119	3.1055	4.3056	3.8269
97	0.3459	0.4121	0.7348	0.2952	2.2025	3.6133	3.3027	3.2836	3.2619	4.5491	4.0627
98	0.3254	0.3879	0.6921	0.2779	2.2740	3.8608	3.5022	3.4801	3.4345	4.8207	4.3284
99	0.3046	0.3631	0.6484	0.2604	2.3530	4.1505	3.7325	3.7070	3.6261	5.1255	4.6300
100	0.2834	0.3379	0.6038	0.2426	2.4406	4.4938	4.0010	3.9719	3.8399	5.4702	4.9754
101	0.2617	0.3122	0.5582	0.2245	2.5382	4.9071	4.3179	4.2847	4.0701	5.8631	5.3749
102	0.2397	0.2860	0.5116	0.2062	2.6474	5.4139	4.6973	4.6597	4.3178	6.3190	5.8423
103	0.2172	0.2593	0.4640	0.1876	2.7701	6.0497	5.1597	5.1169	4.5844	6.8543	6.3719
104	0.1944	0.2322	0.4154	0.1688	2.9090	6.8704	5.7350	5.6865	4.8711	7.4919	6.9747
105	0.1711	0.2046	0.3659	0.1496	3.0671	7.9701	6.4700	6.4152	5.1792	8.2642	7.6645
106	0.1474	0.1765	0.3154	0.1302	3.2486	9.5193	7.4414	7.3797	5.5097	9.2190	8.4585
107	0.1234	0.1479	0.2639	0.1106	3.4589	11.8634	8.7843	8.7160	5.8637	10.4297	9.3778
108	0.0989	0.1189	0.2114	0.0907	3.7051	15.8228	10.7611	10.6887	6.2419	12.0153	10.4495
109	0.0740	0.0894	0.1579	0.0705	3.9968	23.9412	13.9571	13.8929	6.6444	14.1819	11.7074
110	0.0487	0.0594	0.1035	0.0500	4.3478	50.0000	20.0000	20.0000	7.0711	17.3205	13.1951

Age	Javelin	Weight	3000m RaceWalk	5000m RaceWalk	10k RaceWalk	20k RaceWalk	Half Marathon	Marathon
30	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
31	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
32	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
33	1.0000	1.0048	1.0000	1.0000	1.0000	1.0000	0.9935	1.0000
34	1.0038	1.0200	1.0000	1.0000	1.0000	1.0000	0.9869	1.0000
35	1.0236	1.0355	0.9965	0.9992	1.0000	0.9931	0.9802	0.9982
36	1.0439	1.0514	0.9880	0.9923	0.9994	0.9858	0.9734	0.9918
37	1.0646	1.0676	0.9795	0.9853	0.9920	0.9785	0.9666	0.9854
38	1.0858	1.0842	0.9710	0.9782	0.9846	0.9711	0.9596	0.9789
39	1.1075	1.1012	0.9625	0.9711	0.9770	0.9637	0.9526	0.9722
40	1.1298	1.1186	0.9540	0.9639	0.9695	0.9563	0.9455	0.9654
41	1.1526	1.1365	0.9455	0.9566	0.9619	0.9488	0.9384	0.9585
42	1.1759	1.1548	0.9370	0.9494	0.9542	0.9413	0.9311	0.9515
43	1.1998	1.1736	0.9285	0.9420	0.9465	0.9338	0.9238	0.9444
44	1.2244	1.1929	0.9200	0.9346	0.9388	0.9262	0.9164	0.9371
45	1.2495	1.2126	0.9115	0.9272	0.9310	0.9186	0.9090	0.9298
46	1.2754	1.2330	0.9031	0.9197	0.9231	0.9109	0.9014	0.9223
47	1.3019	1.2539	0.8946	0.9121	0.9152	0.9032	0.8938	0.9148
48	1.3291	1.2754	0.8862	0.9045	0.9073	0.8955	0.8862	0.9071
49	1.3570	1.2975	0.8777	0.8969	0.8993	0.8878	0.8784	0.8993
50	1.2650	1.1544	0.8693	0.8892	0.8913	0.8800	0.8706	0.8915
51	1.2919	1.1749	0.8609	0.8814	0.8832	0.8721	0.8627	0.8835
52	1.3196	1.1960	0.8524	0.8736	0.8751	0.8643	0.8548	0.8754
53	1.3481	1.2177	0.8440	0.8658	0.8669	0.8564	0.8468	0.8672
54	1.3775	1.2402	0.8356	0.8579	0.8587	0.8484	0.8387	0.8590
55	1.4077	1.2633	0.8272	0.8500	0.8505	0.8405	0.8306	0.8506
56	1.4388	1.2873	0.8188	0.8420	0.8422	0.8325	0.8224	0.8421
57	1.4708	1.3120	0.8104	0.8340	0.8339	0.8245	0.8141	0.8336
58	1.5039	1.3376	0.8020	0.8259	0.8255	0.8164	0.8058	0.8249
59	1.5380	1.3640	0.7937	0.8178	0.8171	0.8083	0.7974	0.8162
60	1.5732	1.1715	0.7853	0.8097	0.8087	0.8002	0.7889	0.8073
61	1.6096	1.1954	0.7769	0.8015	0.8002	0.7920	0.7804	0.7984
62	1.6472	1.2202	0.7686	0.7932	0.7916	0.7838	0.7718	0.7894
63	1.6861	1.2459	0.7602	0.7849	0.7831	0.7756	0.7632	0.7803
64	1.7263	1.2726	0.7518	0.7766	0.7745	0.7674	0.7545	0.7711
65	1.7680	1.3004	0.7435	0.7682	0.7658	0.7591	0.7457	0.7618
66	1.8111	1.3293	0.7351	0.7598	0.7571	0.7508	0.7369	0.7524
67	1.8559	1.3594	0.7268	0.7514	0.7484	0.7424	0.7280	0.7430
68	1.9023	1.3908	0.7185	0.7429	0.7397	0.7341	0.7191	0.7335
69	1.9505	1.4235	0.7102	0.7344	0.7309	0.7257	0.7101	0.7239
70	2.0006	1.4577	0.7018	0.7258	0.7221	0.7172	0.7011	0.7142

Age	Javelin	Weight	3000m RaceWalk	5000m RaceWalk	10k RaceWalk	20k RaceWalk	Half Marathon	Marathon
71	2.0527	1.4935	0.6935	0.7172	0.7132	0.7086	0.6920	0.7044
72	2.1070	1.5309	0.6852	0.7085	0.7043	0.6997	0.6828	0.6946
73	2.1635	1.5701	0.6769	0.6999	0.6954	0.6906	0.6736	0.6846
74	2.2224	1.6112	0.6686	0.6911	0.6864	0.6813	0.6644	0.6746
75	2.0428	1.3741	0.6603	0.6824	0.6774	0.6718	0.6551	0.6646
76	2.1003	1.4119	0.6520	0.6736	0.6684	0.6620	0.6457	0.6544
77	2.1605	1.4516	0.6437	0.6648	0.6593	0.6520	0.6363	0.6442
78	2.2235	1.4935	0.6354	0.6559	0.6502	0.6418	0.6268	0.6339
79	2.2895	1.5378	0.6272	0.6470	0.6411	0.6314	0.6173	0.6235
80	2.3589	1.5846	0.6189	0.6381	0.6320	0.6207	0.6078	0.6131
81	2.4318	1.6342	0.6106	0.6291	0.6228	0.6099	0.5982	0.6025
82	2.5089	1.6869	0.6023	0.6201	0.6135	0.5988	0.5879	0.5914
83	2.5906	1.7430	0.5941	0.6111	0.6043	0.5875	0.5769	0.5795
84	2.6774	1.8027	0.5858	0.6020	0.5950	0.5760	0.5653	0.5670
85	2.7698	1.8666	0.5776	0.5929	0.5857	0.5642	0.5530	0.5538
86	2.8684	1.9349	0.5693	0.5837	0.5764	0.5523	0.5401	0.5400
87	2.9737	2.0083	0.5611	0.5746	0.5670	0.5401	0.5265	0.5254
88	3.0866	2.0872	0.5528	0.5654	0.5576	0.5277	0.5122	0.5103
89	3.2079	2.1725	0.5446	0.5561	0.5482	0.5151	0.4972	0.4944
90	3.3387	2.2647	0.5364	0.5469	0.5387	0.5022	0.4816	0.4779
91	3.4800	2.3650	0.5282	0.5376	0.5292	0.4892	0.4653	0.4608
92	3.6334	2.4742	0.5197	0.5280	0.5194	0.4759	0.4484	0.4429
93	3.8003	2.5938	0.5110	0.5182	0.5093	0.4624	0.4307	0.4245
94	3.9827	2.7253	0.5021	0.5081	0.4989	0.4487	0.4125	0.4053
95	4.1830	2.8706	0.4930	0.4977	0.4882	0.4348	0.3935	0.3855
96	4.4040	3.0318	0.4837	0.4870	0.4771	0.4206	0.3739	0.3651
97	4.6489	3.2120	0.4742	0.4761	0.4658	0.4063	0.3536	0.3439
98	4.9221	3.4145	0.4644	0.4650	0.4541	0.3917	0.3327	0.3222
99	5.2287	3.6438	0.4544	0.4535	0.4421	0.3769	0.3111	0.2997
100	5.5753	3.9056	0.4442	0.4418	0.4299	0.3619	0.2888	0.2767
101	5.9705	4.2049	0.4338	0.4298	0.4173	0.3467	0.2659	0.2529
102	6.4253	4.5501	0.4231	0.4176	0.4044	0.3312	0.2424	0.2285
103	6.9542	4.9527	0.4123	0.4050	0.3911	0.3156	0.2181	0.2035
104	7.5772	5.4282	0.4012	0.3923	0.3776	0.2997	0.1932	0.1778
105	8.3220	5.9984	0.3899	0.3792	0.3638	0.2836	0.1677	0.1515
106	9.2282	6.6946	0.3783	0.3659	0.3496	0.2673	0.1414	0.1245
107	10.3549	7.5636	0.3666	0.3523	0.3352	0.2508	0.1146	0.0968
108	11.7940	8.6787	0.3546	0.3385	0.3204	0.2341	0.0870	0.0685
109	13.6966	10.1616	0.3424	0.3244	0.3054	0.2172	0.0588	0.0396
110	16.3299	12.2297	0.3300	0.3100	0.2900	0.2000	0.0300	0.0100

Age	60m	100m	200m	400m	800m	1000m	1500m	Mile	3000m	5000m	10000m
30	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
31	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
32	1.0000	1.0000	0.9981	1.0000	1.0000	1.0000	1.0000	0.9994	1.0000	1.0000	1.0000
33	1.0000	1.0000	0.9917	0.9950	1.0000	1.0000	0.9973	0.9936	1.0000	1.0000	1.0000
34	1.0000	1.0000	0.9854	0.9887	1.0000	1.0000	0.9911	0.9876	1.0000	1.0000	0.9973
35	0.9991	0.9999	0.9791	0.9824	0.9965	0.9997	0.9849	0.9816	0.9993	1.0000	0.9897
36	0.9946	0.9932	0.9729	0.9761	0.9887	0.9923	0.9786	0.9756	0.9922	1.0000	0.9822
37	0.9901	0.9866	0.9667	0.9699	0.9810	0.9849	0.9723	0.9695	0.9851	0.9943	0.9747
38	0.9855	0.9799	0.9605	0.9636	0.9732	0.9776	0.9660	0.9633	0.9780	0.9863	0.9672
39	0.9809	0.9733	0.9543	0.9574	0.9656	0.9702	0.9596	0.9571	0.9708	0.9782	0.9597
40	0.9763	0.9668	0.9482	0.9513	0.9580	0.9629	0.9532	0.9509	0.9636	0.9701	0.9523
41	0.9716	0.9602	0.9421	0.9451	0.9504	0.9556	0.9468	0.9445	0.9564	0.9621	0.9449
42	0.9669	0.9537	0.9360	0.9390	0.9429	0.9483	0.9403	0.9381	0.9491	0.9540	0.9375
43	0.9622	0.9473	0.9299	0.9329	0.9354	0.9411	0.9338	0.9317	0.9419	0.9460	0.9301
44	0.9574	0.9409	0.9239	0.9269	0.9279	0.9338	0.9272	0.9252	0.9345	0.9380	0.9228
45	0.9526	0.9345	0.9179	0.9208	0.9205	0.9266	0.9206	0.9187	0.9272	0.9299	0.9155
46	0.9478	0.9281	0.9120	0.9148	0.9132	0.9194	0.9140	0.9121	0.9199	0.9219	0.9082
47	0.9429	0.9218	0.9060	0.9088	0.9059	0.9122	0.9073	0.9055	0.9125	0.9139	0.9009
48	0.9380	0.9155	0.9001	0.9028	0.8986	0.9051	0.9006	0.8988	0.9051	0.9059	0.8937
49	0.9331	0.9093	0.8942	0.8969	0.8914	0.8979	0.8939	0.8920	0.8976	0.8980	0.8865
50	0.9281	0.9031	0.8883	0.8909	0.8842	0.8908	0.8871	0.8852	0.8901	0.8900	0.8793
51	0.9232	0.8969	0.8825	0.8850	0.8771	0.8838	0.8803	0.8784	0.8827	0.8820	0.8722
52	0.9181	0.8908	0.8767	0.8791	0.8700	0.8767	0.8734	0.8715	0.8751	0.8740	0.8650
53	0.9131	0.8847	0.8709	0.8733	0.8629	0.8696	0.8666	0.8645	0.8676	0.8661	0.8579
54	0.9080	0.8786	0.8652	0.8674	0.8559	0.8626	0.8596	0.8576	0.8600	0.8582	0.8509
55	0.9029	0.8726	0.8594	0.8616	0.8489	0.8556	0.8527	0.8505	0.8524	0.8502	0.8438
56	0.8978	0.8666	0.8537	0.8558	0.8420	0.8486	0.8457	0.8434	0.8448	0.8423	0.8368
57	0.8926	0.8606	0.8480	0.8501	0.8351	0.8416	0.8387	0.8363	0.8372	0.8344	0.8298
58	0.8874	0.8546	0.8424	0.8443	0.8283	0.8347	0.8316	0.8291	0.8295	0.8265	0.8228
59	0.8822	0.8487	0.8368	0.8386	0.8214	0.8277	0.8246	0.8219	0.8218	0.8185	0.8158
60	0.8769	0.8429	0.8312	0.8329	0.8147	0.8208	0.8174	0.8146	0.8141	0.8106	0.8089
61	0.8716	0.8370	0.8256	0.8272	0.8079	0.8139	0.8103	0.8073	0.8064	0.8028	0.8019
62	0.8663	0.8312	0.8200	0.8215	0.8012	0.8070	0.8031	0.7999	0.7986	0.7949	0.7950
63	0.8610	0.8254	0.8145	0.8159	0.7946	0.8002	0.7959	0.7925	0.7908	0.7870	0.7882
64	0.8556	0.8197	0.8090	0.8103	0.7880	0.7934	0.7887	0.7851	0.7830	0.7791	0.7813
65	0.8502	0.8139	0.8035	0.8047	0.7814	0.7865	0.7814	0.7776	0.7752	0.7713	0.7745
66	0.8448	0.8083	0.7980	0.7991	0.7748	0.7797	0.7741	0.7700	0.7674	0.7634	0.7677
67	0.8393	0.8026	0.7926	0.7935	0.7683	0.7729	0.7668	0.7625	0.7595	0.7556	0.7609
68	0.8338	0.7970	0.7872	0.7880	0.7619	0.7662	0.7594	0.7548	0.7516	0.7477	0.7541
69	0.8283	0.7914	0.7818	0.7825	0.7554	0.7594	0.7520	0.7472	0.7437	0.7399	0.7474
70	0.8228	0.7858	0.7764	0.7770	0.7490	0.7527	0.7446	0.7395	0.7357	0.7321	0.7407

Age	60m	100m	200m	400m	800m	1000m	1500m	Mile	3000m	5000m	10000m
71	0.8172	0.7803	0.7711	0.7715	0.7427	0.7459	0.7371	0.7317	0.7278	0.7242	0.7340
72	0.8116	0.7748	0.7658	0.7654	0.7363	0.7392	0.7296	0.7239	0.7198	0.7164	0.7273
73	0.8060	0.7693	0.7605	0.7588	0.7300	0.7325	0.7221	0.7161	0.7118	0.7086	0.7206
74	0.8003	0.7638	0.7552	0.7517	0.7238	0.7259	0.7146	0.7082	0.7038	0.7008	0.7140
75	0.7946	0.7584	0.7500	0.7440	0.7169	0.7188	0.7070	0.7003	0.6957	0.6930	0.7073
76	0.7889	0.7530	0.7447	0.7357	0.7095	0.7112	0.6994	0.6923	0.6877	0.6852	0.7007
77	0.7832	0.7477	0.7388	0.7269	0.7014	0.7032	0.6918	0.6843	0.6796	0.6775	0.6942
78	0.7774	0.7423	0.7322	0.7175	0.6928	0.6946	0.6835	0.6763	0.6715	0.6697	0.6868
79	0.7716	0.7370	0.7249	0.7075	0.6836	0.6854	0.6746	0.6682	0.6634	0.6619	0.6787
80	0.7658	0.7317	0.7170	0.6970	0.6737	0.6756	0.6651	0.6601	0.6552	0.6541	0.6698
81	0.7593	0.7257	0.7083	0.6859	0.6633	0.6652	0.6549	0.6513	0.6464	0.6456	0.6601
82	0.7521	0.7190	0.6990	0.6743	0.6523	0.6541	0.6440	0.6417	0.6367	0.6362	0.6496
83	0.7442	0.7116	0.6890	0.6620	0.6406	0.6425	0.6325	0.6314	0.6263	0.6261	0.6383
84	0.7357	0.7035	0.6783	0.6493	0.6284	0.6302	0.6204	0.6204	0.6151	0.6151	0.6263
85	0.7264	0.6946	0.6669	0.6360	0.6156	0.6173	0.6076	0.6087	0.6032	0.6034	0.6135
86	0.7164	0.6850	0.6549	0.6221	0.6022	0.6038	0.5942	0.5962	0.5905	0.5908	0.5999
87	0.7058	0.6747	0.6421	0.6076	0.5882	0.5897	0.5801	0.5830	0.5771	0.5775	0.5856
88	0.6944	0.6637	0.6287	0.5926	0.5735	0.5750	0.5654	0.5691	0.5629	0.5633	0.5704
89	0.6824	0.6520	0.6146	0.5770	0.5583	0.5596	0.5501	0.5545	0.5480	0.5484	0.5545
90	0.6696	0.6396	0.5998	0.5609	0.5425	0.5436	0.5341	0.5391	0.5323	0.5326	0.5378
91	0.6562	0.6264	0.5843	0.5442	0.5261	0.5270	0.5175	0.5230	0.5158	0.5161	0.5203
92	0.6421	0.6125	0.5682	0.5269	0.5091	0.5098	0.5002	0.5062	0.4986	0.4987	0.5021
93	0.6273	0.5980	0.5513	0.5091	0.4915	0.4920	0.4823	0.4886	0.4806	0.4806	0.4830
94	0.6118	0.5827	0.5338	0.4907	0.4733	0.4736	0.4638	0.4704	0.4619	0.4617	0.4632
95	0.5956	0.5666	0.5156	0.4718	0.4544	0.4545	0.4446	0.4514	0.4425	0.4419	0.4426
96	0.5787	0.5499	0.4966	0.4523	0.4350	0.4349	0.4248	0.4317	0.4222	0.4214	0.4213
97	0.5612	0.5324	0.4771	0.4322	0.4150	0.4146	0.4043	0.4112	0.4013	0.4000	0.3991
98	0.5429	0.5142	0.4568	0.4116	0.3944	0.3937	0.3832	0.3901	0.3795	0.3779	0.3762
99	0.5239	0.4953	0.4358	0.3904	0.3732	0.3722	0.3614	0.3682	0.3570	0.3550	0.3524
100	0.5043	0.4757	0.4142	0.3686	0.3514	0.3500	0.3390	0.3456	0.3338	0.3313	0.3279
101	0.4840	0.4554	0.3918	0.3463	0.3289	0.3273	0.3160	0.3223	0.3098	0.3067	0.3027
102	0.4630	0.4343	0.3688	0.3234	0.3059	0.3039	0.2923	0.2983	0.2851	0.2814	0.2766
103	0.4412	0.4126	0.3451	0.2999	0.2823	0.2799	0.2680	0.2735	0.2596	0.2553	0.2498
104	0.4189	0.3901	0.3207	0.2759	0.2580	0.2553	0.2431	0.2480	0.2333	0.2283	0.2221
105	0.3958	0.3669	0.2957	0.2514	0.2332	0.2300	0.2175	0.2218	0.2063	0.2006	0.1937
106	0.3720	0.3429	0.2699	0.2262	0.2078	0.2041	0.1913	0.1949	0.1785	0.1721	0.1646
107	0.3475	0.3183	0.2435	0.2005	0.1817	0.1776	0.1644	0.1672	0.1500	0.1428	0.1346
108	0.3224	0.2929	0.2163	0.1742	0.1551	0.1504	0.1369	0.1389	0.1208	0.1126	0.1038
109	0.2965	0.2668	0.1885	0.1474	0.1279	0.1225	0.1088	0.1098	0.0908	0.0817	0.0723
110	0.2700	0.2400	0.1600	0.1200	0.1000	0.0939	0.0800	0.0800	0.0600	0.0500	0.0400

Age	60m Hurdles	Short Hurdles	Long Hurdles	Steeple Chase	High Jump	Pole Vault	Long Jump	Triple Jump	Shot Put	Discus	Hammer
30	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
31	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
32	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0053	1.0000	1.0098	1.0000	1.0000
33	1.0000	1.0000	0.9924	1.0000	1.0000	1.0000	1.0162	1.0000	1.0217	1.0000	1.0000
34	1.0000	1.0000	0.9844	1.0000	1.0041	1.0020	1.0272	1.0000	1.0338	1.0000	1.0000
35	1.0000	0.9957	0.9765	0.9967	1.0136	1.0129	1.0385	1.0017	1.0462	1.0000	1.0000
36	0.9951	0.9888	0.9685	0.9884	1.0233	1.0240	1.0499	1.0119	1.0589	1.0000	1.0012
37	0.9889	0.9820	0.9605	0.9802	1.0330	1.0353	1.0614	1.0223	1.0718	1.0000	1.0127
38	0.9825	0.9750	0.9525	0.9719	1.0429	1.0469	1.0732	1.0330	1.0851	1.0000	1.0247
39	0.9762	0.9680	0.9445	0.9637	1.0530	1.0587	1.0851	1.0438	1.0986	1.0064	1.0370
40	0.9698	0.9609	0.9366	0.9554	1.0631	1.0708	1.0972	1.0549	1.1125	1.0187	1.0496
41	0.9633	0.9537	0.9286	0.9472	1.0734	1.0831	1.1095	1.0662	1.1266	1.0313	1.0627
42	0.9568	0.9465	0.9206	0.9389	1.0838	1.0957	1.1220	1.0778	1.1411	1.0443	1.0761
43	0.9503	0.9392	0.9126	0.9307	1.0944	1.1085	1.1348	1.0896	1.1559	1.0576	1.0900
44	0.9437	0.9318	0.9046	0.9225	1.1051	1.1217	1.1477	1.1017	1.1711	1.0714	1.1043
45	0.9371	0.9244	0.8967	0.9142	1.1159	1.1351	1.1608	1.1141	1.1867	1.0856	1.1190
46	0.9304	0.9169	0.8887	0.9060	1.1269	1.1488	1.1742	1.1268	1.2026	1.1003	1.1342
47	0.9237	0.9093	0.8807	0.8977	1.1381	1.1629	1.1877	1.1397	1.2190	1.1154	1.1499
48	0.9170	0.9017	0.8727	0.8895	1.1494	1.1773	1.2015	1.1530	1.2357	1.1310	1.1661
49	0.9102	0.8940	0.8647	0.8812	1.1608	1.1920	1.2156	1.1666	1.2529	1.1471	1.1829
50	0.9132	0.9662	0.8568	0.8730	1.1724	1.2070	1.2299	1.1805	1.1551	1.0078	1.0911
51	0.9063	0.9577	0.8488	0.8647	1.1842	1.2225	1.2444	1.1947	1.1715	1.0226	1.1074
52	0.8993	0.9491	0.8408	0.8565	1.1961	1.2383	1.2592	1.2093	1.1885	1.0380	1.1242
53	0.8923	0.9405	0.8328	0.8482	1.2082	1.2544	1.2742	1.2243	1.2058	1.0539	1.1416
54	0.8853	0.9318	0.8248	0.8400	1.2205	1.2710	1.2895	1.2396	1.2237	1.0703	1.1596
55	0.8782	0.9230	0.8169	0.8318	1.2330	1.2881	1.3051	1.2554	1.2420	1.0873	1.1783
56	0.8711	0.9141	0.8089	0.8235	1.2456	1.3055	1.3210	1.2715	1.2609	1.1050	1.1977
57	0.8640	0.9052	0.8009	0.8153	1.2584	1.3234	1.3372	1.2881	1.2803	1.1232	1.2178
58	0.8568	0.8962	0.7929	0.8070	1.2714	1.3418	1.3537	1.3051	1.3003	1.1422	1.2386
59	0.8496	0.8872	0.7849	0.7988	1.2846	1.3606	1.3705	1.3226	1.3209	1.1618	1.2602
60	0.8732	0.9457	1.1628	1.2613	1.2981	1.3800	1.3876	1.3405	1.2252	0.9653	1.1709
61	0.8657	0.9359	1.1508	1.2481	1.3117	1.3999	1.4050	1.3590	1.2452	0.9826	1.1922
62	0.8581	0.9259	1.1389	1.2350	1.3255	1.4204	1.4228	1.3780	1.2658	1.0005	1.2144
63	0.8505	0.9160	1.1270	1.2218	1.3395	1.4415	1.4410	1.3975	1.2871	1.0193	1.2374
64	0.8428	0.9059	1.1150	1.2086	1.3538	1.4631	1.4595	1.4176	1.3090	1.0387	1.2614
65	0.8351	0.8958	1.1031	1.1955	1.3683	1.4854	1.4783	1.4383	1.3317	1.0590	1.2865
66	0.8274	0.8856	1.0911	1.1823	1.3830	1.5083	1.4976	1.4596	1.3552	1.0802	1.3126
67	0.8196	0.8754	1.0792	1.1692	1.3979	1.5320	1.5173	1.4815	1.3794	1.1022	1.3399
68	0.8118	0.8651	1.0672	1.1560	1.4131	1.5563	1.5373	1.5041	1.4045	1.1253	1.3684
69	0.8040	0.8547	1.0553	1.1429	1.4285	1.5814	1.5578	1.5274	1.4305	1.1494	1.3982
70	0.8174	1.0788	1.0434	1.1297	1.4442	1.6073	1.5787	1.5515	1.3036	1.1746	1.2785

Age	60m Hurdles	Short Hurdles	Long Hurdles	Steeple Chase	High Jump	Pole Vault	Long Jump	Triple Jump	Shot Put	Discus	Hammer
71	0.8093	1.0654	1.0314	1.1166	1.4602	1.6341	1.6001	1.5763	1.3286	1.2010	1.3078
72	0.8011	1.0519	1.0195	1.1034	1.4764	1.6617	1.6220	1.6020	1.3545	1.2287	1.3385
73	0.7929	1.0384	1.0075	1.0902	1.4929	1.6902	1.6443	1.6285	1.3814	1.2578	1.3707
74	0.7847	1.0248	0.9956	1.0771	1.5096	1.7197	1.6671	1.6559	1.4094	1.2883	1.4046
75	0.7765	1.0111	0.9836	1.0639	1.5267	1.7502	1.6917	1.6842	1.4385	1.3205	1.4403
76	0.7675	0.9973	0.9709	1.0499	1.5440	1.7818	1.7180	1.7136	1.4688	1.3543	1.4779
77	0.7579	0.9835	0.9574	1.0351	1.5617	1.8145	1.7463	1.7440	1.5003	1.3901	1.5177
78	0.7476	0.9696	0.9431	1.0195	1.5796	1.8483	1.7768	1.7755	1.5332	1.4279	1.5597
79	0.7366	0.9548	0.9281	1.0030	1.5979	1.8835	1.8095	1.8081	1.5675	1.4679	1.6041
80	0.7249	0.9392	1.3753	0.9857	1.6166	1.9199	1.8448	1.8420	1.3885	1.5103	1.4301
81	0.7125	0.9227	1.3502	0.9675	1.6355	1.9594	1.8827	1.8772	1.4210	1.5553	1.4735
82	0.6994	0.9054	1.3240	0.9486	1.6548	2.0023	1.9237	1.9138	1.4550	1.6032	1.5196
83	0.6856	0.8872	1.2966	0.9288	1.6745	2.0489	1.9679	1.9518	1.4906	1.6543	1.5689
84	0.6712	0.8682	1.2680	0.9081	1.6945	2.0996	2.0156	1.9914	1.5279	1.7088	1.6215
85	0.6560	0.8483	1.2383	0.8867	1.7149	2.1548	2.0674	2.0326	1.5671	1.7672	1.6779
86	0.6402	0.8275	1.2074	0.8644	1.7373	2.2151	2.1236	2.0755	1.6084	1.8299	1.7384
87	0.6236	0.8059	1.1753	0.8412	1.7618	2.2811	2.1848	2.1204	1.6518	1.8973	1.8036
88	0.6064	0.7835	1.1420	0.8173	1.7884	2.3536	2.2514	2.1672	1.6976	1.9700	1.8739
89	0.5885	0.7602	1.1075	0.7925	1.8176	2.4332	2.3243	2.2162	1.7459	2.0487	1.9501
90	0.5699	0.7360	1.0719	0.7668	1.8493	2.5212	2.4042	2.2674	1.7971	2.1341	2.0327
91	0.5506	0.7110	1.0351	0.7404	1.8838	2.6187	2.4922	2.3210	1.8512	2.2271	2.1229
92	0.5307	0.6851	0.9971	0.7131	1.9215	2.7273	2.5894	2.3829	1.9087	2.3288	2.2215
93	0.5100	0.6584	0.9580	0.6850	1.9626	2.8486	2.6973	2.4540	1.9698	2.4404	2.3299
94	0.4886	0.6309	0.9177	0.6560	2.0074	2.9851	2.8175	2.5358	2.0349	2.5636	2.4495
95	0.4666	0.6025	0.8762	0.6262	2.0563	3.1395	2.9522	2.6301	2.1043	2.7000	2.5823
96	0.4439	0.5732	0.8335	0.5956	2.1099	3.3155	3.1041	2.7390	2.1786	2.8521	2.7304
97	0.4205	0.5431	0.7897	0.5642	2.1686	3.5176	3.2766	2.8654	2.2583	3.0227	2.8967
98	0.3964	0.5122	0.7447	0.5319	2.2331	3.7520	3.4739	3.0129	2.3440	3.2153	3.0848
99	0.3716	0.4804	0.6985	0.4988	2.3041	4.0268	3.7017	3.1865	2.4363	3.4345	3.2993
100	0.3461	0.4477	0.6511	0.4649	2.3825	4.3531	3.9676	3.3925	2.5361	3.6863	3.5446
101	0.3200	0.4143	0.6025	0.4301	2.4695	4.7466	4.2815	3.6401	2.6444	3.9784	3.8280
102	0.2931	0.3799	0.5528	0.3945	2.5662	5.2300	4.6577	3.9418	2.7622	4.3214	4.1588
103	0.2656	0.3448	0.5019	0.3581	2.6743	5.8376	5.1163	4.3164	2.8909	4.7298	4.5502
104	0.2374	0.3088	0.4499	0.3208	2.7957	6.6236	5.6874	4.7921	3.0321	5.2243	5.0204
105	0.2085	0.2719	0.3966	0.2827	2.9328	7.6795	6.4179	5.4144	3.1876	5.8353	5.5959
106	0.1789	0.2342	0.3422	0.2438	3.0888	9.1717	7.3844	6.2608	3.3598	6.6095	6.3165
107	0.1487	0.1957	0.2866	0.2040	3.2675	11.4395	8.7228	7.4755	3.5516	7.6223	7.2447
108	0.1177	0.1563	0.2299	0.1634	3.4740	15.2967	10.6976	9.3605	3.7664	9.0040	8.4856
109	0.0861	0.1161	0.1719	0.1220	3.7151	23.3094	13.9020	12.6730	4.0087	11.0010	10.2288
110	0.0538	0.0750	0.1128	0.0798	4.0000	50.0000	20.0000	20.0000	4.2841	14.1421	12.8565

Age	Javelin	Weight	3000m RaceWalk	5000m RaceWalk	10k RaceWalk	20k RaceWalk	Half Marathon	Marathon
30	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
31	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
32	1.0015	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
33	1.0153	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
34	1.0294	1.0000	1.0000	1.0000	0.9970	1.0000	1.0000	1.0000
35	1.0438	1.0000	1.0000	1.0000	0.9914	1.0000	0.9953	1.0000
36	1.0586	1.0124	1.0000	0.9941	0.9857	1.0000	0.9885	1.0000
37	1.0738	1.0257	0.9976	0.9877	0.9800	0.9964	0.9816	1.0000
38	1.0894	1.0391	0.9907	0.9811	0.9742	0.9901	0.9748	0.9947
39	1.1054	1.0529	0.9837	0.9746	0.9683	0.9838	0.9680	0.9876
40	1.1218	1.0668	0.9766	0.9679	0.9624	0.9774	0.9612	0.9804
41	1.1386	1.0810	0.9696	0.9613	0.9564	0.9709	0.9544	0.9733
42	1.1560	1.0955	0.9624	0.9545	0.9503	0.9642	0.9476	0.9661
43	1.1738	1.1102	0.9553	0.9477	0.9442	0.9575	0.9408	0.9589
44	1.1921	1.1252	0.9481	0.9408	0.9380	0.9507	0.9340	0.9517
45	1.2110	1.1405	0.9408	0.9339	0.9318	0.9438	0.9272	0.9445
46	1.2304	1.1560	0.9336	0.9269	0.9254	0.9369	0.9204	0.9372
47	1.2504	1.1718	0.9262	0.9198	0.9191	0.9298	0.9137	0.9299
48	1.2710	1.1880	0.9189	0.9127	0.9126	0.9227	0.9069	0.9226
49	1.2923	1.2044	0.9115	0.9055	0.9061	0.9154	0.9002	0.9153
50	1.2293	0.9978	0.9041	0.8983	0.8995	0.9081	0.8934	0.9079
51	1.2505	1.0117	0.8966	0.8910	0.8929	0.9007	0.8867	0.9005
52	1.2723	1.0259	0.8891	0.8837	0.8862	0.8932	0.8799	0.8931
53	1.2949	1.0405	0.8816	0.8763	0.8795	0.8856	0.8732	0.8857
54	1.3183	1.0553	0.8740	0.8689	0.8727	0.8780	0.8665	0.8783
55	1.3425	1.0704	0.8664	0.8614	0.8658	0.8702	0.8598	0.8708
56	1.3675	1.0858	0.8587	0.8538	0.8589	0.8624	0.8531	0.8633
57	1.3934	1.1015	0.8510	0.8462	0.8520	0.8546	0.8464	0.8558
58	1.4203	1.1176	0.8433	0.8386	0.8449	0.8466	0.8397	0.8483
59	1.4482	1.1340	0.8356	0.8309	0.8378	0.8385	0.8331	0.8407
60	1.3675	1.0071	0.8278	0.8231	0.8307	0.8304	0.8264	0.8331
61	1.3954	1.0221	0.8200	0.8153	0.8235	0.8222	0.8197	0.8255
62	1.4243	1.0374	0.8121	0.8074	0.8163	0.8140	0.8131	0.8179
63	1.4544	1.0530	0.8043	0.7995	0.8090	0.8056	0.8064	0.8103
64	1.4858	1.0690	0.7963	0.7916	0.8016	0.7972	0.7998	0.8026
65	1.5184	1.0854	0.7884	0.7836	0.7942	0.7888	0.7931	0.7950
66	1.5525	1.1022	0.7804	0.7755	0.7867	0.7802	0.7865	0.7873
67	1.5882	1.1193	0.7724	0.7674	0.7792	0.7716	0.7799	0.7796
68	1.6254	1.1368	0.7644	0.7593	0.7717	0.7629	0.7733	0.7718
69	1.6643	1.1548	0.7563	0.7511	0.7640	0.7541	0.7666	0.7641
70	1.5566	1.0263	0.7482	0.7428	0.7564	0.7453	0.7600	0.7563

Age	Javelin	Weight	3000m RaceWalk	5000m RaceWalk	10k RaceWalk	20k RaceWalk	Half Marathon	Marathon
71	1.5956	1.0437	0.7401	0.7346	0.7487	0.7364	0.7534	0.7485
72	1.6367	1.0620	0.7319	0.7262	0.7409	0.7275	0.7468	0.7407
73	1.6798	1.0813	0.7238	0.7179	0.7331	0.7185	0.7396	0.7329
74	1.7252	1.1017	0.7155	0.7094	0.7252	0.7094	0.7318	0.7250
75	1.7731	1.1233	0.7073	0.7010	0.7173	0.7002	0.7233	0.7165
76	1.8236	1.1462	0.6990	0.6925	0.7093	0.6910	0.7142	0.7074
77	1.8770	1.1704	0.6907	0.6839	0.7013	0.6817	0.7044	0.6976
78	1.9336	1.1960	0.6824	0.6754	0.6933	0.6724	0.6941	0.6871
79	1.9936	1.2233	0.6741	0.6667	0.6852	0.6630	0.6831	0.6760
80	1.8402	1.0544	0.6657	0.6581	0.6770	0.6536	0.6715	0.6643
81	1.9010	1.0805	0.6573	0.6494	0.6688	0.6441	0.6592	0.6519
82	1.9658	1.1083	0.6488	0.6406	0.6606	0.6345	0.6463	0.6388
83	2.0351	1.1381	0.6404	0.6318	0.6520	0.6249	0.6328	0.6251
84	2.1095	1.1701	0.6319	0.6230	0.6431	0.6152	0.6187	0.6108
85	2.1894	1.2044	0.6234	0.6141	0.6338	0.6054	0.6039	0.5958
86	2.2754	1.2414	0.6149	0.6052	0.6241	0.5956	0.5885	0.5801
87	2.3685	1.2814	0.6063	0.5963	0.6142	0.5858	0.5725	0.5638
88	2.4694	1.3247	0.5977	0.5873	0.6038	0.5759	0.5558	0.5469
89	2.5791	1.3718	0.5891	0.5783	0.5932	0.5659	0.5385	0.5293
90	2.6989	1.4230	0.5805	0.5692	0.5822	0.5559	0.5206	0.5110
91	2.8303	1.4791	0.5718	0.5601	0.5708	0.5459	0.5021	0.4921
92	2.9731	1.5407	0.5631	0.5510	0.5591	0.5357	0.4829	0.4726
93	3.1287	1.6087	0.5544	0.5418	0.5471	0.5256	0.4631	0.4524
94	3.2990	1.6841	0.5452	0.5322	0.5347	0.5154	0.4426	0.4316
95	3.4861	1.7680	0.5355	0.5220	0.5219	0.5051	0.4216	0.4101
96	3.6924	1.8622	0.5253	0.5114	0.5089	0.4942	0.3999	0.3879
97	3.9212	1.9684	0.5146	0.5002	0.4954	0.4828	0.3776	0.3651
98	4.1761	2.0892	0.5034	0.4885	0.4817	0.4707	0.3546	0.3417
99	4.4618	2.2278	0.4917	0.4764	0.4676	0.4581	0.3310	0.3176
100	4.7841	2.3883	0.4795	0.4637	0.4531	0.4448	0.3068	0.2929
101	5.1505	2.5764	0.4668	0.4506	0.4384	0.4310	0.2820	0.2675
102	5.5705	2.7997	0.4536	0.4370	0.4232	0.4166	0.2565	0.2415
103	6.0565	3.0692	0.4399	0.4228	0.4078	0.4016	0.2304	0.2148
104	6.6254	3.4008	0.4257	0.4082	0.3920	0.3860	0.2036	0.1875
105	7.2999	3.8185	0.4110	0.3931	0.3758	0.3698	0.1763	0.1595
106	8.1120	4.3608	0.3958	0.3774	0.3593	0.3530	0.1483	0.1309
107	9.1084	5.0931	0.3801	0.3613	0.3425	0.3356	0.1197	0.1017
108	10.3592	6.1364	0.3639	0.3447	0.3253	0.3177	0.0904	0.0718
109	11.9750	7.7413	0.3472	0.3276	0.3078	0.2991	0.0605	0.0412
110	14.1421	10.5283	0.3300	0.3100	0.2900	0.2800	0.0300	0.0100