

WILKS FORMULA for MEN and WOMEN

by Robert Wilks, Australia

A formula used to determine the best lifter or lift of powerlifters of different body weights.

Find the lifters kilo bodyweight coefficient number from the list by looking down the left hand column and the tenths of a kilo across the top. EG 69.3 kg has a coefficient of .7552. Multiply this number by the individual lift or total. The lifter with the highest resulting figure is the "best lifter".

Note: [Sean Anderson](#), an Associate Professor at Idaho State University has converted the [Wilks co-efficients for use with pounds](#), as used in the USA.

Wilks Formula for Men

BWT	0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
40	1.3354	1.3311	1.3268	1.3225	1.3182	1.3140	1.3098	1.3057	1.3016	1.2975
41	1.2934	1.2894	1.2854	1.2814	1.2775	1.2736	1.2697	1.2658	1.2620	1.2582
42	1.2545	1.2507	1.2470	1.2433	1.2397	1.2360	1.2324	1.2289	1.2253	1.2218
43	1.2183	1.2148	1.2113	1.2079	1.2045	1.2011	1.1978	1.1944	1.1911	1.1878
44	1.1846	1.1813	1.1781	1.1749	1.1717	1.1686	1.1654	1.1623	1.1592	1.1562
45	1.1531	1.1501	1.1471	1.1441	1.1411	1.1382	1.1352	1.1323	1.1294	1.1266
46	1.1237	1.1209	1.1181	1.1153	1.1125	1.1097	1.1070	1.1042	1.1015	1.0988
47	1.0962	1.0935	1.0909	1.0882	1.0856	1.0830	1.0805	1.0779	1.0754	1.0728
48	1.0703	1.0678	1.0653	1.0629	1.0604	1.0580	1.0556	1.0532	1.0508	1.0484
49	1.0460	1.0437	1.0413	1.0390	1.0367	1.0344	1.0321	1.0299	1.0276	1.0254
50	1.0232	1.0210	1.0188	1.0166	1.0144	1.0122	1.0101	1.0079	1.0058	1.0037
51	1.0016	0.9995	0.9975	0.9954	0.9933	0.9913	0.9893	0.9873	0.9853	0.9833
52	0.9813	0.9793	0.9773	0.9754	0.9735	0.9715	0.9696	0.9677	0.9658	0.9639
53	0.9621	0.9602	0.9583	0.9565	0.9547	0.9528	0.9510	0.9492	0.9474	0.9457
54	0.9439	0.9421	0.9404	0.9386	0.9369	0.9352	0.9334	0.9317	0.9300	0.9283
55	0.9267	0.9250	0.9233	0.9217	0.9200	0.9184	0.9168	0.9152	0.9135	0.9119
56	0.9103	0.9088	0.9072	0.9056	0.9041	0.9025	0.9010	0.8994	0.8979	0.8964
57	0.8949	0.8934	0.8919	0.8904	0.8889	0.8874	0.8859	0.8845	0.8830	0.8816
58	0.8802	0.8787	0.8773	0.8759	0.8745	0.8731	0.8717	0.8703	0.8689	0.8675
59	0.8662	0.8648	0.8635	0.8621	0.8608	0.8594	0.8581	0.8568	0.8555	0.8542
60	0.8529	0.8516	0.8503	0.8490	0.8477	0.8465	0.8452	0.8439	0.8427	0.8415
61	0.8402	0.8390	0.8378	0.8365	0.8353	0.8341	0.8329	0.8317	0.8305	0.8293
62	0.8281	0.8270	0.8258	0.8246	0.8235	0.8223	0.8212	0.8200	0.8189	0.8178
63	0.8166	0.8155	0.8144	0.8133	0.8122	0.8111	0.8100	0.8089	0.8078	0.8067
64	0.8057	0.8046	0.8035	0.8025	0.8014	0.8004	0.7993	0.7983	0.7973	0.7962
65	0.7952	0.7942	0.7932	0.7922	0.7911	0.7901	0.7891	0.7881	0.7872	0.7862
66	0.7852	0.7842	0.7832	0.7823	0.7813	0.7804	0.7794	0.7785	0.7775	0.7766
67	0.7756	0.7747	0.7738	0.7729	0.7719	0.7710	0.7701	0.7692	0.7683	0.7674
68	0.7665	0.7656	0.7647	0.7638	0.7630	0.7621	0.7612	0.7603	0.7595	0.7586
69	0.7578	0.7569	0.7561	0.7552	0.7544	0.7535	0.7527	0.7519	0.7510	0.7502
70	0.7494	0.7486	0.7478	0.7469	0.7461	0.7453	0.7445	0.7437	0.7430	0.7422
71	0.7414	0.7406	0.7398	0.7390	0.7383	0.7375	0.7367	0.7360	0.7352	0.7345
72	0.7337	0.7330	0.7322	0.7315	0.7307	0.7300	0.7293	0.7285	0.7278	0.7271
73	0.7264	0.7256	0.7249	0.7242	0.7235	0.7228	0.7221	0.7214	0.7207	0.7200
74	0.7193	0.7186	0.7179	0.7173	0.7166	0.7159	0.7152	0.7146	0.7139	0.7132
75	0.7126	0.7119	0.7112	0.7106	0.7099	0.7093	0.7086	0.7080	0.7074	0.7067
76	0.7061	0.7055	0.7048	0.7042	0.7036	0.7029	0.7023	0.7017	0.7011	0.7005

77	0.6999	0.6993	0.6987	0.6981	0.6975	0.6969	0.6963	0.6957	0.6951	0.6945
78	0.6939	0.6933	0.6927	0.6922	0.6916	0.6910	0.6905	0.6899	0.6893	0.6888
79	0.6882	0.6876	0.6871	0.6865	0.6860	0.6854	0.6849	0.6843	0.6838	0.6832
80	0.6827	0.6822	0.6816	0.6811	0.6806	0.6800	0.6795	0.6790	0.6785	0.6779
81	0.6774	0.6769	0.6764	0.6759	0.6754	0.6749	0.6744	0.6739	0.6734	0.6729
82	0.6724	0.6719	0.6714	0.6709	0.6704	0.6699	0.6694	0.6689	0.6685	0.6680
83	0.6675	0.6670	0.6665	0.6661	0.6656	0.6651	0.6647	0.6642	0.6637	0.6633
84	0.6628	0.6624	0.6619	0.6615	0.6610	0.6606	0.6601	0.6597	0.6592	0.6588
85	0.6583	0.6579	0.6575	0.6570	0.6566	0.6562	0.6557	0.6553	0.6549	0.6545
86	0.6540	0.6536	0.6532	0.6528	0.6523	0.6519	0.6515	0.6511	0.6507	0.6503
87	0.6499	0.6495	0.6491	0.6487	0.6483	0.6479	0.6475	0.6471	0.6467	0.6463
88	0.6459	0.6455	0.6451	0.6447	0.6444	0.6440	0.6436	0.6432	0.6428	0.6424
89	0.6421	0.6417	0.6413	0.6410	0.6406	0.6402	0.6398	0.6395	0.6391	0.6388
90	0.6384	0.6380	0.6377	0.6373	0.6370	0.6366	0.6363	0.6359	0.6356	0.6352
91	0.6349	0.6345	0.6342	0.6338	0.6335	0.6331	0.6328	0.6325	0.6321	0.6318
92	0.6315	0.6311	0.6308	0.6305	0.6301	0.6298	0.6295	0.6292	0.6288	0.6285
93	0.6282	0.6279	0.6276	0.6272	0.6269	0.6266	0.6263	0.6260	0.6257	0.6254
94	0.6250	0.6247	0.6244	0.6241	0.6238	0.6235	0.6232	0.6229	0.6226	0.6223
95	0.6220	0.6217	0.6214	0.6211	0.6209	0.6206	0.6203	0.6200	0.6197	0.6194
96	0.6191	0.6188	0.6186	0.6183	0.6180	0.6177	0.6174	0.6172	0.6169	0.6166
97	0.6163	0.6161	0.6158	0.6155	0.6152	0.6150	0.6147	0.6144	0.6142	0.6139
98	0.6136	0.6134	0.6131	0.6129	0.6126	0.6123	0.6121	0.6118	0.6116	0.6113
99	0.6111	0.6108	0.6106	0.6103	0.6101	0.6098	0.6096	0.6093	0.6091	0.6088
100	0.6086	0.6083	0.6081	0.6079	0.6076	0.6074	0.6071	0.6069	0.6067	0.6064
101	0.6062	0.6060	0.6057	0.6055	0.6053	0.6050	0.6048	0.6046	0.6044	0.6041
102	0.6039	0.6037	0.6035	0.6032	0.6030	0.6028	0.6026	0.6024	0.6021	0.6019
103	0.6017	0.6015	0.6013	0.6011	0.6009	0.6006	0.6004	0.6002	0.6000	0.5998
104	0.5996	0.5994	0.5992	0.5990	0.5988	0.5986	0.5984	0.5982	0.5980	0.5978
105	0.5976	0.5974	0.5972	0.5970	0.5968	0.5966	0.5964	0.5962	0.5960	0.5958
106	0.5956	0.5954	0.5952	0.5950	0.5948	0.5946	0.5945	0.5943	0.5941	0.5939
107	0.5937	0.5935	0.5933	0.5932	0.5930	0.5928	0.5926	0.5924	0.5923	0.5921
108	0.5919	0.5917	0.5916	0.5914	0.5912	0.5910	0.5909	0.5907	0.5905	0.5903
109	0.5902	0.5900	0.5898	0.5897	0.5895	0.5893	0.5892	0.5890	0.5888	0.5887
110	0.5885	0.5883	0.5882	0.5880	0.5878	0.5877	0.5875	0.5874	0.5872	0.5870
111	0.5869	0.5867	0.5866	0.5864	0.5863	0.5861	0.5860	0.5858	0.5856	0.5855
112	0.5853	0.5852	0.5850	0.5849	0.5847	0.5846	0.5844	0.5843	0.5841	0.5840
113	0.5839	0.5837	0.5836	0.5834	0.5833	0.5831	0.5830	0.5828	0.5827	0.5826
114	0.5824	0.5823	0.5821	0.5820	0.5819	0.5817	0.5816	0.5815	0.5813	0.5812
115	0.5811	0.5809	0.5808	0.5806	0.5805	0.5804	0.5803	0.5801	0.5800	0.5799
116	0.5797	0.5796	0.5795	0.5793	0.5792	0.5791	0.5790	0.5788	0.5787	0.5786
117	0.5785	0.5783	0.5782	0.5781	0.5780	0.5778	0.5777	0.5776	0.5775	0.5774
118	0.5772	0.5771	0.5770	0.5769	0.5768	0.5766	0.5765	0.5764	0.5763	0.5762
119	0.5761	0.5759	0.5758	0.5757	0.5756	0.5755	0.5754	0.5753	0.5751	0.5750
120	0.5749	0.5748	0.5747	0.5746	0.5745	0.5744	0.5743	0.5742	0.5740	0.5739
121	0.5738	0.5737	0.5736	0.5735	0.5734	0.5733	0.5732	0.5731	0.5730	0.5729
122	0.5728	0.5727	0.5726	0.5725	0.5724	0.5723	0.5722	0.5721	0.5720	0.5719
123	0.5718	0.5717	0.5716	0.5715	0.5714	0.5713	0.5712	0.5711	0.5710	0.5709
124	0.5708	0.5707	0.5706	0.5705	0.5704	0.5703	0.5702	0.5701	0.5700	0.5699
125	0.5698	0.5698	0.5697	0.5696	0.5695	0.5694	0.5693	0.5692	0.5691	0.5690
126	0.5689	0.5688	0.5688	0.5687	0.5686	0.5685	0.5684	0.5683	0.5682	0.5681
127	0.5681	0.5680	0.5679	0.5678	0.5677	0.5676	0.5675	0.5675	0.5674	0.5673
128	0.5672	0.5671	0.5670	0.5670	0.5669	0.5668	0.5667	0.5666	0.5665	0.5665
129	0.5664	0.5663	0.5662	0.5661	0.5661	0.5660	0.5659	0.5658	0.5658	0.5657
130	0.5656	0.5655	0.5654	0.5654	0.5653	0.5652	0.5651	0.5651	0.5650	0.5649
131	0.5648	0.5647	0.5647	0.5646	0.5645	0.5644	0.5644	0.5643	0.5642	0.5642
132	0.5641	0.5640	0.5639	0.5639	0.5638	0.5637	0.5636	0.5636	0.5635	0.5634
133	0.5634	0.5633	0.5632	0.5631	0.5631	0.5630	0.5629	0.5629	0.5628	0.5627
134	0.5627	0.5626	0.5625	0.5624	0.5624	0.5623	0.5622	0.5622	0.5621	0.5620

135	0.5620	0.5619	0.5618	0.5618	0.5617	0.5616	0.5616	0.5615	0.5614	0.5614	0.5614
136	0.5613	0.5612	0.5612	0.5611	0.5610	0.5610	0.5609	0.5609	0.5608	0.5607	
137	0.5607	0.5606	0.5605	0.5605	0.5604	0.5603	0.5603	0.5602	0.5602	0.5601	
138	0.5600	0.5600	0.5599	0.5598	0.5598	0.5597	0.5597	0.5596	0.5595	0.5595	
139	0.5594	0.5593	0.5593	0.5592	0.5592	0.5591	0.5590	0.5590	0.5589	0.5589	
140	0.5588	0.5587	0.5587	0.5586	0.5586	0.5585	0.5584	0.5584	0.5583	0.5583	
141	0.5582	0.5582	0.5581	0.5580	0.5580	0.5579	0.5579	0.5578	0.5578	0.5577	
142	0.5576	0.5576	0.5575	0.5575	0.5574	0.5573	0.5573	0.5572	0.5572	0.5571	
143	0.5571	0.5570	0.5570	0.5569	0.5568	0.5568	0.5567	0.5567	0.5566	0.5566	
144	0.5565	0.5564	0.5564	0.5563	0.5563	0.5562	0.5562	0.5561	0.5561	0.5560	
145	0.5560	0.5559	0.5558	0.5558	0.5557	0.5557	0.5556	0.5556	0.5555	0.5555	
146	0.5554	0.5554	0.5553	0.5552	0.5552	0.5551	0.5551	0.5550	0.5550	0.5549	
147	0.5549	0.5548	0.5548	0.5547	0.5547	0.5546	0.5546	0.5545	0.5544	0.5544	
148	0.5543	0.5543	0.5542	0.5542	0.5541	0.5541	0.5540	0.5540	0.5539	0.5539	
149	0.5538	0.5538	0.5537	0.5537	0.5536	0.5536	0.5535	0.5535	0.5534	0.5533	
150	0.5533	0.5532	0.5532	0.5531	0.5531	0.5530	0.5530	0.5529	0.5529	0.5528	
151	0.5528	0.5527	0.5527	0.5526	0.5526	0.5525	0.5525	0.5524	0.5524	0.5523	
152	0.5523	0.5522	0.5522	0.5521	0.5521	0.5520	0.5520	0.5519	0.5519	0.5518	
153	0.5518	0.5517	0.5516	0.5516	0.5515	0.5515	0.5514	0.5514	0.5513	0.5513	
154	0.5512	0.5512	0.5511	0.5511	0.5510	0.5510	0.5509	0.5509	0.5508	0.5508	
155	0.5507	0.5507	0.5506	0.5506	0.5505	0.5505	0.5504	0.5504	0.5503	0.5503	
156	0.5502	0.5502	0.5501	0.5501	0.5500	0.5500	0.5499	0.5499	0.5498	0.5498	
157	0.5497	0.5497	0.5496	0.5496	0.5495	0.5495	0.5494	0.5494	0.5493	0.5493	
158	0.5492	0.5492	0.5491	0.5491	0.5490	0.5490	0.5489	0.5489	0.5488	0.5488	
159	0.5487	0.5487	0.5486	0.5486	0.5485	0.5485	0.5484	0.5484	0.5483	0.5483	
160	0.5482	0.5482	0.5481	0.5481	0.5480	0.5480	0.5479	0.5479	0.5478	0.5478	
161	0.5477	0.5477	0.5476	0.5476	0.5475	0.5475	0.5474	0.5474	0.5473	0.5472	
162	0.5472	0.5471	0.5471	0.5470	0.5470	0.5469	0.5469	0.5468	0.5468	0.5467	
163	0.5467	0.5466	0.5466	0.5465	0.5465	0.5464	0.5464	0.5463	0.5463	0.5462	
164	0.5462	0.5461	0.5461	0.5460	0.5460	0.5459	0.5459	0.5458	0.5458	0.5457	
165	0.5457	0.5456	0.5456	0.5455	0.5455	0.5454	0.5454	0.5453	0.5453	0.5452	
166	0.5452	0.5451	0.5451	0.5450	0.5450	0.5449	0.5449	0.5448	0.5448	0.5447	
167	0.5447	0.5446	0.5446	0.5445	0.5445	0.5444	0.5444	0.5443	0.5443	0.5442	
168	0.5442	0.5441	0.5441	0.5440	0.5440	0.5439	0.5439	0.5438	0.5438	0.5437	
169	0.5436	0.5436	0.5435	0.5435	0.5434	0.5434	0.5433	0.5433	0.5432	0.5432	
170	0.5431	0.5431	0.5430	0.5430	0.5429	0.5429	0.5428	0.5428	0.5427	0.5427	
171	0.5426	0.5426	0.5425	0.5425	0.5424	0.5424	0.5423	0.5423	0.5422	0.5422	
172	0.5421	0.5421	0.5420	0.5420	0.5419	0.5419	0.5418	0.5418	0.5417	0.5417	
173	0.5416	0.5416	0.5415	0.5415	0.5414	0.5414	0.5413	0.5413	0.5412	0.5412	
174	0.5411	0.5411	0.5410	0.5410	0.5409	0.5409	0.5408	0.5408	0.5407	0.5407	
175	0.5406	0.5406	0.5405	0.5405	0.5404	0.5404	0.5403	0.5403	0.5402	0.5402	
176	0.5401	0.5401	0.5400	0.5400	0.5399	0.5399	0.5398	0.5398	0.5397	0.5397	
177	0.5396	0.5396	0.5395	0.5395	0.5394	0.5394	0.5393	0.5393	0.5392	0.5392	
178	0.5391	0.5391	0.5390	0.5390	0.5389	0.5389	0.5388	0.5388	0.5387	0.5387	
179	0.5387	0.5386	0.5386	0.5385	0.5385	0.5384	0.5384	0.5383	0.5383	0.5382	
180	0.5382	0.5381	0.5381	0.5380	0.5380	0.5379	0.5379	0.5378	0.5378	0.5377	
181	0.5377	0.5377	0.5376	0.5376	0.5375	0.5375	0.5374	0.5374	0.5373	0.5373	
182	0.5372	0.5372	0.5371	0.5371	0.5371	0.5370	0.5370	0.5369	0.5369	0.5368	
183	0.5368	0.5367	0.5367	0.5366	0.5366	0.5366	0.5365	0.5365	0.5364	0.5364	
184	0.5363	0.5363	0.5362	0.5362	0.5362	0.5361	0.5361	0.5360	0.5360	0.5359	
185	0.5359	0.5359	0.5358	0.5358	0.5357	0.5357	0.5356	0.5356	0.5356	0.5355	
186	0.5355	0.5354	0.5354	0.5353	0.5353	0.5353	0.5352	0.5352	0.5351	0.5351	
187	0.5351	0.5350	0.5350	0.5349	0.5349	0.5349	0.5348	0.5348	0.5347	0.5347	
188	0.5347	0.5346	0.5346	0.5345	0.5345	0.5345	0.5344	0.5344	0.5344	0.5343	
189	0.5343	0.5342	0.5342	0.5342	0.5341	0.5341	0.5341	0.5340	0.5340	0.5340	
190	0.5339	0.5339	0.5338	0.5338	0.5338	0.5337	0.5337	0.5337	0.5336	0.5336	
191	0.5336	0.5335	0.5335	0.5335	0.5334	0.5334	0.5334	0.5333	0.5333	0.5333	
192	0.5332	0.5332	0.5332	0.5332	0.5331	0.5331	0.5331	0.5330	0.5330	0.5330	

193	0.5329	0.5329	0.5329	0.5329	0.5328	0.5328	0.5328	0.5327	0.5327	0.5327	0.5327
194	0.5327	0.5326	0.5326	0.5326	0.5326	0.5325	0.5325	0.5325	0.5325	0.5325	0.5324
195	0.5324	0.5324	0.5324	0.5323	0.5323	0.5323	0.5323	0.5322	0.5322	0.5322	0.5322
196	0.5322	0.5322	0.5321	0.5321	0.5321	0.5321	0.5321	0.5320	0.5320	0.5320	0.5320
197	0.5320	0.5320	0.5319	0.5319	0.5319	0.5319	0.5319	0.5319	0.5318	0.5318	0.5318
198	0.5318	0.5318	0.5318	0.5318	0.5318	0.5317	0.5317	0.5317	0.5317	0.5317	0.5317
199	0.5317	0.5317	0.5317	0.5317	0.5316	0.5316	0.5316	0.5316	0.5316	0.5316	0.5316
200	0.5316	0.5316	0.5316	0.5316	0.5316	0.5315	0.5315	0.5315	0.5315	0.5315	0.5315
201	0.5315	0.5315	0.5315	0.5315	0.5315	0.5315	0.5315	0.5315	0.5315	0.5315	0.5315
202	0.5315	0.5315	0.5315	0.5315	0.5315	0.5315	0.5315	0.5315	0.5315	0.5315	0.5315
203	0.5315	0.5315	0.5315	0.5315	0.5315	0.5315	0.5316	0.5316	0.5316	0.5316	0.5316
204	0.5316	0.5316	0.5316	0.5316	0.5316	0.5316	0.5316	0.5317	0.5317	0.5317	0.5317
205	0.5317	0.5317	0.5317	0.5317	0.5318	0.5318	0.5318	0.5318	0.5318	0.5318	0.5318

Wilks Formula for Women

BWT	0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
40	1.4936	1.4915	1.4894	1.4872	1.4851	1.4830	1.4809	1.4788	1.4766	1.4745
41	1.4724	1.4702	1.4681	1.4660	1.4638	1.4617	1.4595	1.4574	1.4552	1.4531
42	1.4510	1.4488	1.4467	1.4445	1.4424	1.4402	1.4381	1.4359	1.4338	1.4316
43	1.4295	1.4273	1.4252	1.4231	1.4209	1.4188	1.4166	1.4145	1.4123	1.4102
44	1.4081	1.4059	1.4038	1.4017	1.3995	1.3974	1.3953	1.3932	1.3910	1.3889
45	1.3868	1.3847	1.3825	1.3804	1.3783	1.3762	1.3741	1.3720	1.3699	1.3678
46	1.3657	1.3636	1.3615	1.3594	1.3573	1.3553	1.3532	1.3511	1.3490	1.3470
47	1.3449	1.3428	1.3408	1.3387	1.3367	1.3346	1.3326	1.3305	1.3285	1.3265
48	1.3244	1.3224	1.3204	1.3183	1.3163	1.3143	1.3123	1.3103	1.3083	1.3063
49	1.3043	1.3023	1.3004	1.2984	1.2964	1.2944	1.2925	1.2905	1.2885	1.2866
50	1.2846	1.2827	1.2808	1.2788	1.2769	1.2750	1.2730	1.2711	1.2692	1.2673
51	1.2654	1.2635	1.2616	1.2597	1.2578	1.2560	1.2541	1.2522	1.2504	1.2485
52	1.2466	1.2448	1.2429	1.2411	1.2393	1.2374	1.2356	1.2338	1.2320	1.2302
53	1.2284	1.2266	1.2248	1.2230	1.2212	1.2194	1.2176	1.2159	1.2141	1.2123
54	1.2106	1.2088	1.2071	1.2054	1.2036	1.2019	1.2002	1.1985	1.1967	1.1950
55	1.1933	1.1916	1.1900	1.1883	1.1866	1.1849	1.1832	1.1816	1.1799	1.1783
56	1.1766	1.1750	1.1733	1.1717	1.1701	1.1684	1.1668	1.1652	1.1636	1.1620
57	1.1604	1.1588	1.1572	1.1556	1.1541	1.1525	1.1509	1.1494	1.1478	1.1463
58	1.1447	1.1432	1.1416	1.1401	1.1386	1.1371	1.1355	1.1340	1.1325	1.1310
59	1.1295	1.1281	1.1266	1.1251	1.1236	1.1221	1.1207	1.1192	1.1178	1.1163
60	1.1149	1.1134	1.1120	1.1106	1.1092	1.1078	1.1063	1.1049	1.1035	1.1021
61	1.1007	1.0994	1.0980	1.0966	1.0952	1.0939	1.0925	1.0911	1.0898	1.0884
62	1.0871	1.0858	1.0844	1.0831	1.0818	1.0805	1.0792	1.0779	1.0765	1.0753
63	1.0740	1.0727	1.0714	1.0701	1.0688	1.0676	1.0663	1.0650	1.0638	1.0625
64	1.0613	1.0601	1.0588	1.0576	1.0564	1.0551	1.0539	1.0527	1.0515	1.0503
65	1.0491	1.0479	1.0467	1.0455	1.0444	1.0432	1.0420	1.0408	1.0397	1.0385
66	1.0374	1.0362	1.0351	1.0339	1.0328	1.0317	1.0306	1.0294	1.0283	1.0272
67	1.0261	1.0250	1.0239	1.0228	1.0217	1.0206	1.0195	1.0185	1.0174	1.0163
68	1.0153	1.0142	1.0131	1.0121	1.0110	1.0100	1.0090	1.0079	1.0069	1.0059
69	1.0048	1.0038	1.0028	1.0018	1.0008	0.9998	0.9988	0.9978	0.9968	0.9958
70	0.9948	0.9939	0.9929	0.9919	0.9910	0.9900	0.9890	0.9881	0.9871	0.9862
71	0.9852	0.9843	0.9834	0.9824	0.9815	0.9806	0.9797	0.9788	0.9779	0.9769
72	0.9760	0.9751	0.9742	0.9734	0.9725	0.9716	0.9707	0.9698	0.9689	0.9681
73	0.9672	0.9663	0.9655	0.9646	0.9638	0.9629	0.9621	0.9613	0.9604	0.9596
74	0.9587	0.9579	0.9571	0.9563	0.9555	0.9547	0.9538	0.9530	0.9522	0.9514
75	0.9506	0.9498	0.9491	0.9483	0.9475	0.9467	0.9459	0.9452	0.9444	0.9436
76	0.9429	0.9421	0.9414	0.9406	0.9399	0.9391	0.9384	0.9376	0.9369	0.9362
77	0.9354	0.9347	0.9340	0.9333	0.9326	0.9318	0.9311	0.9304	0.9297	0.9290
78	0.9283	0.9276	0.9269	0.9263	0.9256	0.9249	0.9242	0.9235	0.9229	0.9222
79	0.9215	0.9209	0.9202	0.9195	0.9189	0.9182	0.9176	0.9169	0.9163	0.9156

80	0.9150	0.9144	0.9137	0.9131	0.9125	0.9119	0.9112	0.9106	0.9100	0.9094
81	0.9088	0.9082	0.9076	0.9070	0.9064	0.9058	0.9052	0.9046	0.9040	0.9034
82	0.9028	0.9023	0.9017	0.9011	0.9005	0.9000	0.8994	0.8988	0.8983	0.8977
83	0.8972	0.8966	0.8961	0.8955	0.8950	0.8944	0.8939	0.8933	0.8928	0.8923
84	0.8917	0.8912	0.8907	0.8902	0.8896	0.8891	0.8886	0.8881	0.8876	0.8871
85	0.8866	0.8861	0.8856	0.8851	0.8846	0.8841	0.8836	0.8831	0.8826	0.8821
86	0.8816	0.8811	0.8807	0.8802	0.8797	0.8792	0.8788	0.8783	0.8778	0.8774
87	0.8769	0.8765	0.8760	0.8755	0.8751	0.8746	0.8742	0.8737	0.8733	0.8729
88	0.8724	0.8720	0.8716	0.8711	0.8707	0.8703	0.8698	0.8694	0.8690	0.8686
89	0.8681	0.8677	0.8673	0.8669	0.8665	0.8661	0.8657	0.8653	0.8649	0.8645
90	0.8641	0.8637	0.8633	0.8629	0.8625	0.8621	0.8617	0.8613	0.8609	0.8606
91	0.8602	0.8598	0.8594	0.8590	0.8587	0.8583	0.8579	0.8576	0.8572	0.8568
92	0.8565	0.8561	0.8558	0.8554	0.8550	0.8547	0.8543	0.8540	0.8536	0.8533
93	0.8530	0.8526	0.8523	0.8519	0.8516	0.8513	0.8509	0.8506	0.8503	0.8499
94	0.8496	0.8493	0.8489	0.8486	0.8483	0.8480	0.8477	0.8473	0.8470	0.8467
95	0.8464	0.8461	0.8458	0.8455	0.8452	0.8449	0.8446	0.8443	0.8440	0.8437
96	0.8434	0.8431	0.8428	0.8425	0.8422	0.8419	0.8416	0.8413	0.8410	0.8407
97	0.8405	0.8402	0.8399	0.8396	0.8393	0.8391	0.8388	0.8385	0.8382	0.8380
98	0.8377	0.8374	0.8372	0.8369	0.8366	0.8364	0.8361	0.8359	0.8356	0.8353
99	0.8351	0.8348	0.8346	0.8343	0.8341	0.8338	0.8336	0.8333	0.8331	0.8328
100	0.8326	0.8323	0.8321	0.8319	0.8316	0.8314	0.8311	0.8309	0.8307	0.8304
101	0.8302	0.8300	0.8297	0.8295	0.8293	0.8291	0.8288	0.8286	0.8284	0.8282
102	0.8279	0.8277	0.8275	0.8273	0.8271	0.8268	0.8266	0.8264	0.8262	0.8260
103	0.8258	0.8256	0.8253	0.8251	0.8249	0.8247	0.8245	0.8243	0.8241	0.8239
104	0.8237	0.8235	0.8233	0.8231	0.8229	0.8227	0.8225	0.8223	0.8221	0.8219
105	0.8217	0.8215	0.8214	0.8212	0.8210	0.8208	0.8206	0.8204	0.8202	0.8200
106	0.8198	0.8197	0.8195	0.8193	0.8191	0.8189	0.8188	0.8186	0.8184	0.8182
107	0.8180	0.8179	0.8177	0.8175	0.8173	0.8172	0.8170	0.8168	0.8167	0.8165
108	0.8163	0.8161	0.8160	0.8158	0.8156	0.8155	0.8153	0.8152	0.8150	0.8148
109	0.8147	0.8145	0.8143	0.8142	0.8140	0.8139	0.8137	0.8135	0.8134	0.8132
110	0.8131	0.8129	0.8128	0.8126	0.8124	0.8123	0.8121	0.8120	0.8118	0.8117
111	0.8115	0.8114	0.8112	0.8111	0.8109	0.8108	0.8106	0.8105	0.8103	0.8102
112	0.8101	0.8099	0.8098	0.8096	0.8095	0.8093	0.8092	0.8090	0.8089	0.8088
113	0.8086	0.8085	0.8083	0.8082	0.8081	0.8079	0.8078	0.8077	0.8075	0.8074
114	0.8072	0.8071	0.8070	0.8068	0.8067	0.8066	0.8064	0.8063	0.8062	0.8060
115	0.8059	0.8058	0.8056	0.8055	0.8054	0.8052	0.8051	0.8050	0.8049	0.8047
116	0.8046	0.8045	0.8043	0.8042	0.8041	0.8040	0.8038	0.8037	0.8036	0.8034
117	0.8033	0.8032	0.8031	0.8029	0.8028	0.8027	0.8026	0.8024	0.8023	0.8022
118	0.8021	0.8020	0.8018	0.8017	0.8016	0.8015	0.8013	0.8012	0.8011	0.8010
119	0.8009	0.8007	0.8006	0.8005	0.8004	0.8003	0.8001	0.8000	0.7999	0.7998
120	0.7997	0.7995	0.7994	0.7993	0.7992	0.7991	0.7989	0.7988	0.7987	0.7986
121	0.7985	0.7984	0.7982	0.7981	0.7980	0.7979	0.7978	0.7977	0.7975	0.7974
122	0.7973	0.7972	0.7971	0.7970	0.7969	0.7967	0.7966	0.7965	0.7964	0.7963
123	0.7962	0.7960	0.7959	0.7958	0.7957	0.7956	0.7955	0.7954	0.7953	0.7951
124	0.7950	0.7949	0.7948	0.7947	0.7946	0.7945	0.7943	0.7942	0.7941	0.7940
125	0.7939	0.7938	0.7937	0.7936	0.7934	0.7933	0.7932	0.7931	0.7930	0.7929
126	0.7928	0.7927	0.7926	0.7924	0.7923	0.7922	0.7921	0.7920	0.7919	0.7918
127	0.7917	0.7915	0.7914	0.7913	0.7912	0.7911	0.7910	0.7909	0.7908	0.7907
128	0.7905	0.7904	0.7903	0.7902	0.7901	0.7900	0.7899	0.7898	0.7897	0.7895
129	0.7894	0.7893	0.7892	0.7891	0.7890	0.7889	0.7888	0.7887	0.7886	0.7884
130	0.7883	0.7882	0.7881	0.7880	0.7879	0.7878	0.7877	0.7876	0.7875	0.7873
131	0.7872	0.7871	0.7870	0.7869	0.7868	0.7867	0.7866	0.7865	0.7864	0.7862
132	0.7861	0.7860	0.7859	0.7858	0.7857	0.7856	0.7855	0.7854	0.7853	0.7852
133	0.7850	0.7849	0.7848	0.7847	0.7846	0.7845	0.7844	0.7843	0.7842	0.7841
134	0.7840	0.7838	0.7837	0.7836	0.7835	0.7834	0.7833	0.7832	0.7831	0.7830
135	0.7829	0.7828	0.7827	0.7825	0.7824	0.7823	0.7822	0.7821	0.7820	0.7819
136	0.7818	0.7817	0.7816	0.7815	0.7814	0.7813	0.7812	0.7811	0.7809	0.7808
137	0.7807	0.7806	0.7805	0.7804	0.7803	0.7802	0.7801	0.7800	0.7799	0.7798

138	0.7797	0.7796	0.7795	0.7794	0.7793	0.7792	0.7791	0.7790	0.7789	0.7787
139	0.7786	0.7785	0.7784	0.7783	0.7782	0.7781	0.7780	0.7779	0.7778	0.7777
140	0.7776	0.7775	0.7774	0.7773	0.7772	0.7771	0.7770	0.7769	0.7768	0.7767
141	0.7766	0.7765	0.7764	0.7763	0.7762	0.7761	0.7760	0.7759	0.7759	0.7758
142	0.7757	0.7756	0.7755	0.7754	0.7753	0.7752	0.7751	0.7750	0.7749	0.7748
143	0.7747	0.7746	0.7745	0.7744	0.7744	0.7743	0.7742	0.7741	0.7740	0.7739
144	0.7738	0.7737	0.7736	0.7736	0.7735	0.7734	0.7733	0.7732	0.7731	0.7730
145	0.7730	0.7729	0.7728	0.7727	0.7726	0.7725	0.7725	0.7724	0.7723	0.7722
146	0.7721	0.7721	0.7720	0.7719	0.7718	0.7717	0.7717	0.7716	0.7715	0.7714
147	0.7714	0.7713	0.7712	0.7712	0.7711	0.7710	0.7709	0.7709	0.7708	0.7707
148	0.7707	0.7706	0.7705	0.7705	0.7704	0.7703	0.7703	0.7702	0.7702	0.7701
149	0.7700	0.7700	0.7699	0.7699	0.7698	0.7698	0.7697	0.7696	0.7696	0.7695
150	0.7695	0.7694	0.7694	0.7693	0.7693	0.7692	0.7692	0.7691	0.7691	0.7691