



World Para Swimming Point Scores 2020 – Long Course Events

Method to calculate the points for a specific performance is the Gompertz function:

$$G(p, a, b, c) = q = ae^{-e^{b-\frac{c}{p}}}$$

To calculate the required performance for given points, the inverse Gompertz function is

$$G^{-1}(q, a, b, c) = p = c / \left(b - \ln \left(\ln \left(\frac{a}{q} \right) \right) \right)$$

with performance p (in seconds), points q , and parameters a, b, c as given in the table below:

Senior Event	Class	a	b (Men)	c (Men)	b (Women)	c (Women)
50 m Freestyle	S1	1200	6.085722	504.192	5.425916	479.502
	S2	1200	6.085722	443.824	5.425916	434.377
	S3	1200	6.085722	334.858	5.425916	351.302
	S4	1200	6.085722	288.454	5.425916	273.242
	S5	1200	6.085722	248.353	5.425916	258.998
	S6	1200	6.085722	227.896	5.425916	236.887
	S7	1200	6.085722	217.037	5.425916	227.830
	S8	1200	6.085722	205.571	5.425916	215.957
	S9	1200	6.085722	198.021	5.425916	204.548
	S10	1200	6.085722	186.582	5.425916	196.094
	S11	1200	6.085722	198.855	5.425916	209.121
	S12	1200	6.085722	181.582	5.425916	186.933
	S13	1200	6.085722	182.453	5.425916	187.723
100 m Freestyle	S1	1200	6.083289	1049.034	5.430932	1066.260
	S2	1200	6.083289	978.421	5.430932	932.461
	S3	1200	6.083289	746.686	5.430932	657.557
	S4	1200	6.083289	627.464	5.430932	597.381
	S5	1200	6.083289	545.086	5.430932	558.674
	S6	1200	6.083289	505.777	5.430932	518.241
	S7	1200	6.083289	475.774	5.430932	489.792
	S8	1200	6.083289	447.432	5.430932	469.967
	S9	1200	6.083289	428.174	5.430932	444.752
	S10	1200	6.083289	405.549	5.430932	422.256
	S11	1200	6.083289	441.594	5.430932	460.915
	S12	1200	6.083289	396.495	5.430932	407.072
	S13	1200	6.083289	394.755	5.430932	408.437
S14	1200	6.083289	411.362	5.430932	421.327	
200 m Freestyle	S1	1200	5.701488	2027.385	5.398492	1987.249
	S2	1200	5.701488	1841.743	5.398492	2036.122
	S3	1200	5.701488	1437.930	5.398492	1478.353
	S4	1200	5.701488	1287.063	5.398492	1270.033
	S5	1200	5.701488	1127.438	5.398492	1179.695
	S6	1200	5.701488	1072.006	5.398492	1081.558

International Paralympic Committee

Adenauerallee 212-214 Tel. +49 228 2097-200
53113 Bonn, Germany Fax +49 228 2097-209

www.paralympic.org
info@paralympic.org



	S7	1200	5.701488	1012.340	5.398492	1074.534
	S8	1200	5.701488	942.902	5.398492	990.861
	S9	1200	5.701488	893.594	5.398492	977.425
	S10	1200	5.701488	844.688	5.398492	898.604
	S11	1200	5.701488	945.517	5.398492	980.894
	S12	1200	5.701488	879.105	5.398492	893.680
	S13	1200	5.701488	828.838	5.398492	914.042
	S14	1200	5.701488	850.723	5.398492	910.061
400 m Freestyle	S6	1200	6.933579	2592.684	6.998877	2770.638
	S7	1200	6.933579	2427.728	6.998877	2639.712
	S8	1200	6.933579	2270.244	6.998877	2521.054
	S9	1200	6.933579	2177.219	6.998877	2448.790
	S10	1200	6.933579	2064.033	6.998877	2327.277
	S11	1200	6.933579	2346.344	6.998877	2597.957
	S12	1200	6.933579	2086.680	6.998877	2287.954
	S13	1200	6.933579	2043.145	6.998877	2295.990
	S14	1200	6.933579	2175.813	6.998877	2354.010
800 m Freestyle	S6	1200	7.557717	5796.237	9.546516	7234.783
	S7	1200	7.557717	5442.301	9.546516	7375.527
	S8	1200	7.557717	4867.441	9.546516	7062.285
	S9	1200	7.557717	4733.559	9.546516	6303.870
	S10	1200	7.557717	4734.691	9.546516	6260.063
	S11	1200	7.557717	5106.139	9.546516	7327.663
	S12	1200	7.557717	5066.757	9.546516	6223.907
	S13	1200	7.557717	4741.388	9.546516	6195.924
	S14	1200	7.557717	4646.560	9.546516	6431.619
1500 m Freestyle	S6	1200	7.132251	11591.395	9.706991	17195.492
	S7	1200	7.132251	9929.260	9.706991	13927.848
	S8	1200	7.132251	10007.465	9.706991	14070.889
	S9	1200	7.132251	8828.053	9.706991	13340.319
	S10	1200	7.132251	8123.826	9.706991	13349.911
	S11	1200	7.132251	10089.667	9.706991	14803.486
	S12	1200	7.132251	10045.408	9.706991	11949.303
	S13	1200	7.132251	8704.895	9.706991	12252.098
	S14	1200	7.132251	8720.536	9.706991	12448.515
50 m Backstroke	S1	1200	4.597462	406.787	4.429507	395.478
	S2	1200	4.597462	344.354	4.429507	360.300
	S3	1200	4.597462	291.734	4.429507	320.063
	S4	1200	4.597462	267.852	4.429507	293.550
	S5	1200	4.597462	233.098	4.429507	260.930
	S6	1200	4.597462	226.570	4.429507	245.449
	S7	1200	4.597462	208.694	4.429507	232.094
	S8	1200	4.597462	191.108	4.429507	219.112
	S9	1200	4.597462	185.056	4.429507	201.457
	S10	1200	4.597462	172.189	4.429507	189.776



	S11	1200	4.597462	191.133	4.429507	213.007
	S12	1200	4.597462	171.645	4.429507	193.448
	S13	1200	4.597462	165.260	4.429507	192.051
100 m Backstroke	S1	1200	6.079564	1030.545	5.995972	1108.255
	S2	1200	6.079564	860.157	5.995972	967.132
	S3	1200	6.079564	787.016	5.995972	939.722
	S4	1200	6.079564	766.237	5.995972	794.256
	S5	1200	6.079564	680.796	5.995972	727.929
	S6	1200	6.079564	574.426	5.995972	642.809
	S7	1200	6.079564	538.255	5.995972	615.429
	S8	1200	6.079564	514.103	5.995972	589.092
	S9	1200	6.079564	483.449	5.995972	547.226
	S10	1200	6.079564	462.587	5.995972	511.698
	S11	1200	6.079564	505.119	5.995972	581.534
	S12	1200	6.079564	439.066	5.995972	508.106
	S13	1200	6.079564	436.874	5.995972	503.092
	S14	1200	6.079564	475.362	5.995972	519.455
200 m Backstroke	S6	1200	7.268866	1412.651	7.502644	1646.333
	S7	1200	7.268866	1394.333	7.502644	1495.421
	S8	1200	7.268866	1303.130	7.502644	1547.300
	S9	1200	7.268866	1210.171	7.502644	1427.383
	S10	1200	7.268866	1137.562	7.502644	1346.973
	S11	1200	7.268866	1327.042	7.502644	1500.976
	S12	1200	7.268866	1177.551	7.502644	1346.701
	S13	1200	7.268866	1142.832	7.502644	1375.013
	S14	1200	7.268866	1189.065	7.502644	1344.790
50 m Breaststroke	SB1	1200	4.840233	535.369	4.454299	588.948
	SB2	1200	4.840233	321.076	4.454299	406.970
	SB3	1200	4.840233	295.744	4.454299	331.590
	SB4	1200	4.840233	266.923	4.454299	289.807
	SB5	1200	4.840233	263.047	4.454299	268.554
	SB6	1200	4.840233	227.382	4.454299	261.823
	SB7	1200	4.840233	228.491	4.454299	266.685
	SB8	1200	4.840233	205.431	4.454299	223.612
	SB9	1200	4.840233	199.891	4.454299	211.702
	SB11	1200	4.840233	209.931	4.454299	228.178
	SB12	1200	4.840233	194.756	4.454299	208.146
	SB13	1200	4.840233	191.063	4.454299	221.910
100 m Breaststroke	SB1	1200	5.003431	1415.446	5.036028	1346.322
	SB2	1200	5.003431	844.291	5.036028	1102.412
	SB3	1200	5.003431	719.155	5.036028	985.060
	SB4	1200	5.003431	613.595	5.036028	710.383
	SB5	1200	5.003431	599.459	5.036028	671.340
	SB6	1200	5.003431	530.559	5.036028	635.992
	SB7	1200	5.003431	514.727	5.036028	603.494



	SB8	1200	5.003431	465.449	5.036028	535.921
	SB9	1200	5.003431	442.695	5.036028	521.899
	SB11	1200	5.003431	485.405	5.036028	568.633
	SB12	1200	5.003431	433.652	5.036028	497.253
	SB13	1200	5.003431	429.593	5.036028	506.157
	SB14	1200	5.003431	445.914	5.036028	520.234
200 m Breaststroke	SB4	1200	7.391152	1803.236	8.005541	2203.116
	SB5	1200	7.391152	1773.856	8.005541	2098.727
	SB6	1200	7.391152	1561.630	8.005541	1971.128
	SB7	1200	7.391152	1498.031	8.005541	1781.983
	SB8	1200	7.391152	1340.437	8.005541	1683.446
	SB9	1200	7.391152	1294.513	8.005541	1618.737
	SB11	1200	7.391152	1488.341	8.005541	1759.886
	SB12	1200	7.391152	1424.024	8.005541	1590.862
	SB13	1200	7.391152	1290.117	8.005541	1568.791
	SB14	1200	7.391152	1319.908	8.005541	1629.571
50 m Butterfly	S1	1200	5.080668	801.302	4.373950	590.077
	S2	1200	5.080668	443.426	4.373950	394.651
	S3	1200	5.080668	348.294	4.373950	336.315
	S4	1200	5.080668	261.824	4.373950	278.008
	S5	1200	5.080668	232.635	4.373950	249.915
	S6	1200	5.080668	207.114	4.373950	209.159
	S7	1200	5.080668	203.676	4.373950	204.710
	S8	1200	5.080668	188.653	4.373950	191.947
	S9	1200	5.080668	180.492	4.373950	180.699
	S10	1200	5.080668	171.015	4.373950	175.456
	S11	1200	5.080668	174.992	4.373950	198.138
	S12	1200	5.080668	166.389	4.373950	171.932
	S13	1200	5.080668	171.083	4.373950	174.489
100 m Butterfly	S5	1200	6.730833	616.292	5.790041	829.188
	S6	1200	6.730833	594.480	5.790041	606.985
	S7	1200	6.730833	610.512	5.790041	570.266
	S8	1200	6.730833	493.545	5.790041	503.257
	S9	1200	6.730833	489.049	5.790041	489.989
	S10	1200	6.730833	467.303	5.790041	474.480
	S11	1200	6.730833	499.689	5.790041	558.568
	S12	1200	6.730833	457.286	5.790041	469.463
	S13	1200	6.730833	453.205	5.790041	459.188
	S14	1200	6.730833	479.281	5.790041	494.670
200 m Butterfly	S8	1200	9.771713	1579.652	10.920716	2063.099
	S9	1200	9.771713	1464.888	10.920716	1915.486
	S10	1200	9.771713	1468.241	10.920716	1832.045
	S11	1200	9.771713	1601.389	10.920716	2157.598
	S12	1200	9.771713	1455.837	10.920716	1891.638
	S13	1200	9.771713	1335.500	10.920716	1818.552



	S14	1200	9.771713	1484.061	10.920716	1897.463
150 m Individual	SM1	1200	5.154433	2079.414	4.212135	1335.644
Medley	SM2	1200	5.154433	1631.871	4.212135	1680.890
	SM3	1200	5.154433	1151.745	4.212135	1095.145
	SM4	1200	5.154433	994.949	4.212135	993.688
200 m Individual	SM3	1200	7.222988	2410.099	6.759769	2409.738
Medley	SM4	1200	7.222988	1729.340	6.759769	1888.155
	SM5	1200	7.222988	1666.441	6.759769	1682.712
	SM6	1200	7.222988	1436.381	6.759769	1501.483
	SM7	1200	7.222988	1358.549	6.759769	1468.666
	SM8	1200	7.222988	1263.256	6.759769	1355.421
	SM9	1200	7.222988	1205.562	6.759769	1288.867
	SM10	1200	7.222988	1147.862	6.759769	1227.356
	SM11	1200	7.222988	1254.163	6.759769	1379.868
	SM12	1200	7.222988	1127.464	6.759769	1225.324
	SM13	1200	7.222988	1132.715	6.759769	1212.847
	SM14	1200	7.222988	1167.690	6.759769	1234.003
400 m Individual	SM8	1200	8.629097	3054.313	8.378238	3666.122
Medley	SM9	1200	8.629097	3046.012	8.378238	3207.494
	SM10	1200	8.629097	3077.368	8.378238	3114.256
	SM11	1200	8.629097	3284.572	8.378238	3537.150
	SM12	1200	8.629097	2894.620	8.378238	3272.271
	SM13	1200	8.629097	2873.349	8.378238	3092.671
	SM14	1200	8.629097	2947.724	8.378238	3104.810

Youth Point Scores 2020

For youth events, the formula as shown above does not change apart from an adjustment of the c factor to reflect the performance difference between top performers at major international Para swimming competitions and the average of performances expected at youth events.

Method to calculate the points for a specific performance remains the Gompertz function with an additional static factor of 1.2 applicable to all genders, events, and classes:

$$G(p, a, b, c) = q = ae^{-e^{b-1.2\frac{c}{p}}}$$

To calculate the required performance for given points, the inverse Gompertz function is

$$G^{-1}(q, a, b, c) = p = 1.2 \cdot c / \left(b - \ln \left(\ln \left(\frac{a}{q} \right) \right) \right)$$

with performance p (in seconds), points q , and parameters a, b, c as listed on pages 1-5 in this document.