



World Para Athletics Raza Point Scores 2019

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

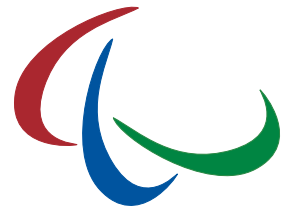
$$G(p, a, b, c) = q = ae^{-e^{b-cp}}$$

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

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

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

Event	Class	a	b (Men)	c (Men)	b (Women)	c (Women)	
Shot Put	F11	1200	3.922857	0.426307	2.952074	0.314824	
	F12	1200	3.922857	0.334861	2.952074	0.341636	
	F13	1200	3.922857	0.458381	2.952074	0.348585	
	F20	1200	3.922857	0.339042	2.952074	0.332389	
	F32	1200	3.133662	0.445856	3.105271	0.685929	
	F33	1200	3.133662	0.413232	3.105271	0.750793	
	F34	1200	3.133662	0.385155	3.105271	0.559560	
	F35	1200	3.922857	0.355911	2.952074	0.378414	
	F36	1200	3.922857	0.380330	2.952074	0.411438	
	F37	1200	3.922857	0.378000	2.952074	0.379556	
	F38	1200	3.922857	0.366540	2.952074	0.407887	
	F40	1200	3.922857	0.506585	2.952074	0.574027	
	F41	1200	3.922857	0.417340	2.952074	0.497549	
	F42	1200	3.922857	0.369081	2.952074	0.448213	
	F43/44	1200	3.922857	0.341609	2.952074	0.351659	
	F46	1200	3.922857	0.352846	2.952074	0.384016	
	F51	n/a	n/a	n/a	n/a	n/a	n/a
	F52	1200	3.133662	0.472978	3.105271	0.878313	
	F53	1200	3.133662	0.537790	3.105271	0.942638	
	F54	1200	3.133662	0.476024	3.105271	0.608958	
F55	1200	3.133662	0.398632	3.105271	0.594901		
F56	1200	3.133662	0.396468	3.105271	0.551953		
F57	1200	3.133662	0.340319	3.105271	0.446106		
F61	1200	3.922857	0.369081	2.952074	0.448213		
F62	1200	3.922857	0.341609	2.952074	0.351659		
F63	1200	3.922857	0.369081	2.952074	0.448213		
F64	1200	3.922857	0.341609	2.952074	0.351659		
Discus	F11	1200	3.204275	0.117990	2.803965	0.114355	
	F12	1200	3.204275	0.100502	2.803965	0.101950	
	F13	1200	3.204275	0.116612	2.803965	0.139831	
	F32	1200	2.584997	0.203343	2.606167	0.339172	
	F33	1200	2.584997	0.131189	2.606167	0.297258	
	F34	1200	2.584997	0.104263	2.606167	0.182204	
	F35	1200	3.204275	0.105860	2.803965	0.150710	
	F36	1200	3.204275	0.114754	2.803965	0.164752	
	F37	1200	3.204275	0.092002	2.803965	0.127156	
	F38	1200	3.204275	0.103511	2.803965	0.135617	
	F40	1200	3.204275	0.192450	2.803965	0.200841	
	F41	1200	3.204275	0.118021	2.803965	0.139955	
	F42	1200	3.204275	0.104469	2.803965	0.143419	



Discus (cont.)	F43/44	1200	3.204275	0.083535	2.803965	0.112045
	F46	1200	3.204275	0.096842	2.803965	0.119869
	F51	1200	2.584997	0.348795	2.606167	0.323428
	F52	1200	2.584997	0.195071	2.606167	0.294917
	F53	1200	2.584997	0.163222	2.606167	0.324314
	F54	1200	2.584997	0.139927	2.606167	0.234234
	F55	1200	2.584997	0.112169	2.606167	0.177525
	F56	1200	2.584997	0.096465	2.606167	0.182595
	F57	1200	2.584997	0.088225	2.606167	0.134236
	F61	1200	3.204275	0.104469	2.803965	0.143419
	F62	1200	3.204275	0.083535	2.803965	0.112045
	F63	1200	3.204275	0.104469	2.803965	0.143419
	F64	1200	3.204275	0.083535	2.803965	0.112045
Javelin	F11	1200	2.856754	0.090010	2.329515	0.149316
	F12	1200	2.856754	0.069867	2.329515	0.089772
	F13	1200	2.856754	0.065788	2.329515	0.091198
	F33	1200	2.612540	0.173699	2.825558	0.321574
	F34	1200	2.612540	0.117104	2.825558	0.210312
	F35	1200	2.856754	0.111681	2.329515	0.150269
	F36	1200	2.856754	0.102161	2.329515	0.133780
	F37	1200	2.856754	0.090577	2.329515	0.124061
	F38	1200	2.856754	0.084835	2.329515	0.129152
	F40	1200	2.856754	0.122520	2.329515	0.167441
	F41	1200	2.856754	0.100661	2.329515	0.157896
	F42	1200	2.856754	0.086574	2.329515	0.128689
	F43/44	1200	2.856754	0.076426	2.329515	0.099495
	F46	1200	2.856754	0.076456	2.329515	0.095086
	F52	1200	2.612540	0.236315	2.825558	0.379507
	F53	1200	2.612540	0.192077	2.825558	0.371284
	F54	1200	2.612540	0.149813	2.825558	0.240747
	F55	1200	2.612540	0.137087	2.825558	0.229111
	F56	1200	2.612540	0.125831	2.825558	0.197175
	F57	1200	2.612540	0.096797	2.825558	0.186750
	F61	1200	2.856754	0.086574	2.329515	0.128689
	F62	1200	2.856754	0.076426	2.329515	0.099495
	F63	1200	2.856754	0.086574	2.329515	0.128689
	F64	1200	2.856754	0.076426	2.329515	0.099495
Club Throw	F31	1200	2.994721	0.134711	2.874588	0.374712
	F32	1200	2.994721	0.130359	2.874588	0.191438
	F51	1200	2.994721	0.153358	2.874588	0.189619
High Jump	T11	1200	7.993768	6.055816	n/a	n/a
	T12	1200	7.993768	4.899041	n/a	n/a
	T13	1200	7.993768	4.706135	n/a	n/a
	T42	1200	7.993768	5.074095	n/a	n/a
	T43/44	1200	7.993768	4.343329	n/a	n/a
	T45-47	1200	7.993768	4.736131	n/a	n/a
	T61	1200	7.993768	5.074095	n/a	n/a
	T62	1200	7.993768	4.343329	n/a	n/a
	T63	1200	7.993768	5.074095	n/a	n/a
	T64	1200	7.993768	4.343329	n/a	n/a
Long Jump	T11	1200	5.725060	1.099445	5.832415	1.499044
	T12	1200	5.725060	1.000330	5.832415	1.219964
	T13	1200	5.725060	1.037540	5.832415	1.282923



T20	1200	5.725060	1.021232	5.832415	1.339986
T35	1200	5.725060	1.742352	5.832415	2.069722
T36	1200	5.725060	1.285811	5.832415	1.734493
T37	1200	5.725060	1.143427	5.832415	1.577640
T38	1200	5.725060	1.095587	5.832415	1.497625
T42	1200	5.725060	1.110217	5.832415	1.690859
T43/44	1200	5.725060	1.007361	5.832415	1.282307
T45-47	1200	5.725060	1.039416	5.832415	1.286839
T61	1200	5.725060	1.110217	5.832415	1.690859
T62	1200	5.725060	1.007361	5.832415	1.282307
T63	1200	5.725060	1.110217	5.832415	1.690859
T64	1200	5.725060	1.007361	5.832415	1.282307
Triple Jump	T11	1200	10.799123	0.956442	n/a
	T12	1200	10.799123	0.836903	n/a
	T13	1200	10.799123	0.916390	n/a
	T20	1200	10.799123	0.883987	8.360106
	T42	1200	n/a	n/a	n/a
	T43/44	1200	n/a	n/a	n/a
	T45-47	1200	10.799123	0.862189	n/a
	T61	1200	n/a	n/a	n/a
	T62	1200	n/a	n/a	n/a
	T63	1200	n/a	n/a	n/a
	T64	1200	n/a	n/a	n/a

Youth Point Scores 2019

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 the average performances at major international Para athletics competitions and the average of performances expected at youth events considering the senior weight implements.

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

$$G(p, a, b, c) = q = ae^{-e^{b-\frac{c}{0.88}p}}$$

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

$$G^{-1}(q, a, b, c) = p = 0.88 \cdot \left(b - \ln \left(\ln \left(\frac{a}{q} \right) \right) \right) / c$$

with performance p (in seconds), points q , and parameters a, b, c as listed on pages 1-3 in this document.