

# Height-for-age BOYS

5 to 19 years (z-scores)



Year: Month	Month	L	M	S	SD	Z-scores (height in cm)						
						-3 SD	-2 SD	-1 SD	Median	1 SD	2 SD	3 SD
5: 1	61	1	110.2647	0.04164	4.5914	96.5	101.1	105.7	110.3	114.9	119.4	124.0
5: 2	62	1	110.8006	0.04172	4.6226	96.9	101.6	106.2	110.8	115.4	120.0	124.7
5: 3	63	1	111.3338	0.04180	4.6538	97.4	102.0	106.7	111.3	116.0	120.6	125.3
5: 4	64	1	111.8636	0.04187	4.6837	97.8	102.5	107.2	111.9	116.5	121.2	125.9
5: 5	65	1	112.3895	0.04195	4.7147	98.2	103.0	107.7	112.4	117.1	121.8	126.5
5: 6	66	1	112.9110	0.04203	4.7456	98.7	103.4	108.2	112.9	117.7	122.4	127.1
5: 7	67	1	113.4280	0.04211	4.7765	99.1	103.9	108.7	113.4	118.2	123.0	127.8
5: 8	68	1	113.9410	0.04218	4.8060	99.5	104.3	109.1	113.9	118.7	123.6	128.4
5: 9	69	1	114.4500	0.04226	4.8367	99.9	104.8	109.6	114.5	119.3	124.1	129.0
5:10	70	1	114.9547	0.04234	4.8672	100.4	105.2	110.1	115.0	119.8	124.7	129.6
5:11	71	1	115.4549	0.04241	4.8964	100.8	105.7	110.6	115.5	120.4	125.2	130.1
6: 0	72	1	115.9509	0.04249	4.9268	101.2	106.1	111.0	116.0	120.9	125.8	130.7
6: 1	73	1	116.4432	0.04257	4.9570	101.6	106.5	111.5	116.4	121.4	126.4	131.3
6: 2	74	1	116.9325	0.04264	4.9860	102.0	107.0	111.9	116.9	121.9	126.9	131.9
6: 3	75	1	117.4196	0.04272	5.0162	102.4	107.4	112.4	117.4	122.4	127.5	132.5
6: 4	76	1	117.9046	0.04280	5.0463	102.8	107.8	112.9	117.9	123.0	128.0	133.0
6: 5	77	1	118.3880	0.04287	5.0753	103.2	108.2	113.3	118.4	123.5	128.5	133.6
6: 6	78	1	118.8700	0.04295	5.1055	103.6	108.7	113.8	118.9	124.0	129.1	134.2
6: 7	79	1	119.3508	0.04303	5.1357	103.9	109.1	114.2	119.4	124.5	129.6	134.8
6: 8	80	1	119.8303	0.04311	5.1659	104.3	109.5	114.7	119.8	125.0	130.2	135.3
6: 9	81	1	120.3085	0.04318	5.1949	104.7	109.9	115.1	120.3	125.5	130.7	135.9
6:10	82	1	120.7853	0.04326	5.2252	105.1	110.3	115.6	120.8	126.0	131.2	136.5
6:11	83	1	121.2604	0.04334	5.2554	105.5	110.8	116.0	121.3	126.5	131.8	137.0
7: 0	84	1	121.7338	0.04342	5.2857	105.9	111.2	116.4	121.7	127.0	132.3	137.6
7: 1	85	1	122.2053	0.04350	5.3159	106.3	111.6	116.9	122.2	127.5	132.8	138.2
7: 2	86	1	122.6750	0.04358	5.3462	106.6	112.0	117.3	122.7	128.0	133.4	138.7

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						-3 SD	-2 SD	-1 SD	Median	1 SD	2 SD	3 SD
7: 3	87	1	123.1429	0.04366	5.3764	107.0	112.4	117.8	123.1	128.5	133.9	139.3
7: 4	88	1	123.6092	0.04374	5.4067	107.4	112.8	118.2	123.6	129.0	134.4	139.8
7: 5	89	1	124.0736	0.04382	5.4369	107.8	113.2	118.6	124.1	129.5	134.9	140.4
7: 6	90	1	124.5361	0.04390	5.4671	108.1	113.6	119.1	124.5	130.0	135.5	140.9
7: 7	91	1	124.9964	0.04398	5.4973	108.5	114.0	119.5	125.0	130.5	136.0	141.5
7: 8	92	1	125.4545	0.04406	5.5275	108.9	114.4	119.9	125.5	131.0	136.5	142.0
7: 9	93	1	125.9104	0.04414	5.5577	109.2	114.8	120.4	125.9	131.5	137.0	142.6
7:10	94	1	126.3640	0.04422	5.5878	109.6	115.2	120.8	126.4	132.0	137.5	143.1
7:11	95	1	126.8156	0.04430	5.6179	110.0	115.6	121.2	126.8	132.4	138.1	143.7
8: 0	96	1	127.2651	0.04438	5.6480	110.3	116.0	121.6	127.3	132.9	138.6	144.2
8: 1	97	1	127.7129	0.04446	5.6781	110.7	116.4	122.0	127.7	133.4	139.1	144.7
8: 2	98	1	128.1590	0.04454	5.7082	111.0	116.7	122.5	128.2	133.9	139.6	145.3
8: 3	99	1	128.6034	0.04462	5.7383	111.4	117.1	122.9	128.6	134.3	140.1	145.8
8: 4	100	1	129.0466	0.04470	5.7684	111.7	117.5	123.3	129.0	134.8	140.6	146.4
8: 5	101	1	129.4887	0.04478	5.7985	112.1	117.9	123.7	129.5	135.3	141.1	146.9
8: 6	102	1	129.9300	0.04487	5.8300	112.4	118.3	124.1	129.9	135.8	141.6	147.4
8: 7	103	1	130.3705	0.04495	5.8602	112.8	118.7	124.5	130.4	136.2	142.1	148.0
8: 8	104	1	130.8103	0.04503	5.8904	113.1	119.0	124.9	130.8	136.7	142.6	148.5
8: 9	105	1	131.2495	0.04511	5.9207	113.5	119.4	125.3	131.3	137.2	143.1	149.0
8:10	106	1	131.6884	0.04519	5.9510	113.8	119.8	125.7	131.7	137.6	143.6	149.5
8:11	107	1	132.1269	0.04527	5.9814	114.2	120.2	126.1	132.1	138.1	144.1	150.1
9: 0	108	1	132.5652	0.04535	6.0118	114.5	120.5	126.6	132.6	138.6	144.6	150.6
9: 1	109	1	133.0031	0.04543	6.0423	114.9	120.9	127.0	133.0	139.0	145.1	151.1
9: 2	110	1	133.4404	0.04551	6.0729	115.2	121.3	127.4	133.4	139.5	145.6	151.7
9: 3	111	1	133.8770	0.04559	6.1035	115.6	121.7	127.8	133.9	140.0	146.1	152.2

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Year: Month	Month	L	M	S	SD	Z-scores (height in cm)						
						-3 SD	-2 SD	-1 SD	Median	1 SD	2 SD	3 SD
9: 4	112	1	134.3130	0.04566	6.1327	115.9	122.0	128.2	134.3	140.4	146.6	152.7
9: 5	113	1	134.7483	0.04574	6.1634	116.3	122.4	128.6	134.7	140.9	147.1	153.2
9: 6	114	1	135.1829	0.04582	6.1941	116.6	122.8	129.0	135.2	141.4	147.6	153.8
9: 7	115	1	135.6168	0.04589	6.2235	116.9	123.2	129.4	135.6	141.8	148.1	154.3
9: 8	116	1	136.0501	0.04597	6.2542	117.3	123.5	129.8	136.1	142.3	148.6	154.8
9: 9	117	1	136.4829	0.04604	6.2837	117.6	123.9	130.2	136.5	142.8	149.1	155.3
9:10	118	1	136.9153	0.04612	6.3145	118.0	124.3	130.6	136.9	143.2	149.5	155.9
9:11	119	1	137.3474	0.04619	6.3441	118.3	124.7	131.0	137.3	143.7	150.0	156.4
10: 0	120	1	137.7795	0.04626	6.3737	118.7	125.0	131.4	137.8	144.2	150.5	156.9
10: 1	121	1	138.2119	0.04633	6.4034	119.0	125.4	131.8	138.2	144.6	151.0	157.4
10: 2	122	1	138.6452	0.04640	6.4331	119.3	125.8	132.2	138.6	145.1	151.5	157.9
10: 3	123	1	139.0797	0.04647	6.4630	119.7	126.2	132.6	139.1	145.5	152.0	158.5
10: 4	124	1	139.5158	0.04654	6.4931	120.0	126.5	133.0	139.5	146.0	152.5	159.0
10: 5	125	1	139.9540	0.04661	6.5233	120.4	126.9	133.4	140.0	146.5	153.0	159.5
10: 6	126	1	140.3948	0.04667	6.5522	120.7	127.3	133.8	140.4	146.9	153.5	160.1
10: 7	127	1	140.8387	0.04674	6.5828	121.1	127.7	134.3	140.8	147.4	154.0	160.6
10: 8	128	1	141.2859	0.04680	6.6122	121.4	128.1	134.7	141.3	147.9	154.5	161.1
10: 9	129	1	141.7368	0.04686	6.6418	121.8	128.5	135.1	141.7	148.4	155.0	161.7
10:10	130	1	142.1916	0.04692	6.6716	122.2	128.8	135.5	142.2	148.9	155.5	162.2
10:11	131	1	142.6501	0.04698	6.7017	122.5	129.2	135.9	142.7	149.4	156.1	162.8
11: 0	132	1	143.1126	0.04703	6.7306	122.9	129.7	136.4	143.1	149.8	156.6	163.3
11: 1	133	1	143.5795	0.04709	6.7612	123.3	130.1	136.8	143.6	150.3	157.1	163.9
11: 2	134	1	144.0511	0.04714	6.7906	123.7	130.5	137.3	144.1	150.8	157.6	164.4
11: 3	135	1	144.5276	0.04719	6.8203	124.1	130.9	137.7	144.5	151.3	158.2	165.0

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						-3 SD	-2 SD	-1 SD	Median	1 SD	2 SD	3 SD
11: 4	136	1	145.0093	0.04723	6.8488	124.5	131.3	138.2	145.0	151.9	158.7	165.6
11: 5	137	1	145.4964	0.04728	6.8791	124.9	131.7	138.6	145.5	152.4	159.3	166.1
11: 6	138	1	145.9891	0.04732	6.9082	125.3	132.2	139.1	146.0	152.9	159.8	166.7
11: 7	139	1	146.4878	0.04736	6.9377	125.7	132.6	139.6	146.5	153.4	160.4	167.3
11: 8	140	1	146.9927	0.04740	6.9675	126.1	133.1	140.0	147.0	154.0	160.9	167.9
11: 9	141	1	147.5041	0.04744	6.9976	126.5	133.5	140.5	147.5	154.5	161.5	168.5
11:10	142	1	148.0224	0.04747	7.0266	126.9	134.0	141.0	148.0	155.0	162.1	169.1
11:11	143	1	148.5478	0.04750	7.0560	127.4	134.4	141.5	148.5	155.6	162.7	169.7
12: 0	144	1	149.0807	0.04753	7.0858	127.8	134.9	142.0	149.1	156.2	163.3	170.3
12: 1	145	1	149.6212	0.04755	7.1145	128.3	135.4	142.5	149.6	156.7	163.9	171.0
12: 2	146	1	150.1694	0.04758	7.1451	128.7	135.9	143.0	150.2	157.3	164.5	171.6
12: 3	147	1	150.7256	0.04759	7.1730	129.2	136.4	143.6	150.7	157.9	165.1	172.2
12: 4	148	1	151.2899	0.04761	7.2029	129.7	136.9	144.1	151.3	158.5	165.7	172.9
12: 5	149	1	151.8623	0.04762	7.2317	130.2	137.4	144.6	151.9	159.1	166.3	173.6
12: 6	150	1	152.4425	0.04763	7.2608	130.7	137.9	145.2	152.4	159.7	167.0	174.2
12: 7	151	1	153.0298	0.04763	7.2888	131.2	138.5	145.7	153.0	160.3	167.6	174.9
12: 8	152	1	153.6234	0.04764	7.3186	131.7	139.0	146.3	153.6	160.9	168.3	175.6
12: 9	153	1	154.2223	0.04763	7.3456	132.2	139.5	146.9	154.2	161.6	168.9	176.3
12:10	154	1	154.8258	0.04763	7.3744	132.7	140.1	147.5	154.8	162.2	169.6	176.9
12:11	155	1	155.4329	0.04762	7.4017	133.2	140.6	148.0	155.4	162.8	170.2	177.6
13: 0	156	1	156.0426	0.04760	7.4276	133.8	141.2	148.6	156.0	163.5	170.9	178.3
13: 1	157	1	156.6539	0.04758	7.4536	134.3	141.7	149.2	156.7	164.1	171.6	179.0
13: 2	158	1	157.2660	0.04756	7.4796	134.8	142.3	149.8	157.3	164.7	172.2	179.7
13: 3	159	1	157.8775	0.04754	7.5055	135.4	142.9	150.4	157.9	165.4	172.9	180.4

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Year: Month	Month	L	M	S	SD	Z-scores (height in cm)						
						-3 SD	-2 SD	-1 SD	Median	1 SD	2 SD	3 SD
13: 4	160	1	158.4871	0.04751	7.5297	135.9	143.4	151.0	158.5	166.0	173.5	181.1
13: 5	161	1	159.0937	0.04747	7.5522	136.4	144.0	151.5	159.1	166.6	174.2	181.8
13: 6	162	1	159.6962	0.04744	7.5760	137.0	144.5	152.1	159.7	167.3	174.8	182.4
13: 7	163	1	160.2939	0.04740	7.5979	137.5	145.1	152.7	160.3	167.9	175.5	183.1
13: 8	164	1	160.8861	0.04735	7.6180	138.0	145.7	153.3	160.9	168.5	176.1	183.7
13: 9	165	1	161.4720	0.04730	7.6376	138.6	146.2	153.8	161.5	169.1	176.7	184.4
13:10	166	1	162.0505	0.04725	7.6569	139.1	146.7	154.4	162.1	169.7	177.4	185.0
13:11	167	1	162.6207	0.04720	7.6757	139.6	147.3	154.9	162.6	170.3	178.0	185.6
14: 0	168	1	163.1816	0.04714	7.6924	140.1	147.8	155.5	163.2	170.9	178.6	186.3
14: 1	169	1	163.7321	0.04707	7.7069	140.6	148.3	156.0	163.7	171.4	179.1	186.9
14: 2	170	1	164.2717	0.04701	7.7224	141.1	148.8	156.5	164.3	172.0	179.7	187.4
14: 3	171	1	164.7994	0.04694	7.7357	141.6	149.3	157.1	164.8	172.5	180.3	188.0
14: 4	172	1	165.3145	0.04687	7.7483	142.1	149.8	157.6	165.3	173.1	180.8	188.6
14: 5	173	1	165.8165	0.04679	7.7586	142.5	150.3	158.1	165.8	173.6	181.3	189.1
14: 6	174	1	166.3050	0.04671	7.7681	143.0	150.8	158.5	166.3	174.1	181.8	189.6
14: 7	175	1	166.7799	0.04663	7.7769	143.4	151.2	159.0	166.8	174.6	182.3	190.1
14: 8	176	1	167.2415	0.04655	7.7851	143.9	151.7	159.5	167.2	175.0	182.8	190.6
14: 9	177	1	167.6899	0.04646	7.7909	144.3	152.1	159.9	167.7	175.5	183.3	191.1
14:10	178	1	168.1255	0.04637	7.7960	144.7	152.5	160.3	168.1	175.9	183.7	191.5
14:11	179	1	168.5482	0.04628	7.8004	145.1	152.9	160.7	168.5	176.3	184.1	191.9
15: 0	180	1	168.9580	0.04619	7.8042	145.5	153.4	161.2	169.0	176.8	184.6	192.4
15: 1	181	1	169.3549	0.04609	7.8056	145.9	153.7	161.5	169.4	177.2	185.0	192.8
15: 2	182	1	169.7389	0.04599	7.8063	146.3	154.1	161.9	169.7	177.5	185.4	193.2
15: 3	183	1	170.1099	0.04589	7.8063	146.7	154.5	162.3	170.1	177.9	185.7	193.5

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15: 4	184	1	170.4680	0.04579	7.8057	147.1	154.9	162.7	170.5	178.3	186.1	193.9
15: 5	185	1	170.8136	0.04569	7.8045	147.4	155.2	163.0	170.8	178.6	186.4	194.2
15: 6	186	1	171.1468	0.04559	7.8026	147.7	155.5	163.3	171.1	178.9	186.8	194.6
15: 7	187	1	171.4680	0.04548	7.7984	148.1	155.9	163.7	171.5	179.3	187.1	194.9
15: 8	188	1	171.7773	0.04538	7.7953	148.4	156.2	164.0	171.8	179.6	187.4	195.2
15: 9	189	1	172.0748	0.04527	7.7898	148.7	156.5	164.3	172.1	179.9	187.7	195.4
15:10	190	1	172.3606	0.04516	7.7838	149.0	156.8	164.6	172.4	180.1	187.9	195.7
15:11	191	1	172.6345	0.04506	7.7789	149.3	157.1	164.9	172.6	180.4	188.2	196.0
16: 0	192	1	172.8967	0.04495	7.7717	149.6	157.4	165.1	172.9	180.7	188.4	196.2
16: 1	193	1	173.1470	0.04484	7.7639	149.9	157.6	165.4	173.1	180.9	188.7	196.4
16: 2	194	1	173.3856	0.04473	7.7555	150.1	157.9	165.6	173.4	181.1	188.9	196.7
16: 3	195	1	173.6126	0.04462	7.7466	150.4	158.1	165.9	173.6	181.4	189.1	196.9
16: 4	196	1	173.8280	0.04451	7.7371	150.6	158.4	166.1	173.8	181.6	189.3	197.0
16: 5	197	1	174.0321	0.04440	7.7270	150.9	158.6	166.3	174.0	181.8	189.5	197.2
16: 6	198	1	174.2251	0.04429	7.7164	151.1	158.8	166.5	174.2	181.9	189.7	197.4
16: 7	199	1	174.4071	0.04418	7.7053	151.3	159.0	166.7	174.4	182.1	189.8	197.5
16: 8	200	1	174.5784	0.04407	7.6937	151.5	159.2	166.9	174.6	182.3	190.0	197.7
16: 9	201	1	174.7392	0.04396	7.6815	151.7	159.4	167.1	174.7	182.4	190.1	197.8
16:10	202	1	174.8896	0.04385	7.6689	151.9	159.6	167.2	174.9	182.6	190.2	197.9
16:11	203	1	175.0301	0.04375	7.6576	152.1	159.7	167.4	175.0	182.7	190.3	198.0
17: 0	204	1	175.1609	0.04364	7.6440	152.2	159.9	167.5	175.2	182.8	190.4	198.1
17: 1	205	1	175.2824	0.04353	7.6300	152.4	160.0	167.7	175.3	182.9	190.5	198.2
17: 2	206	1	175.3951	0.04343	7.6174	152.5	160.2	167.8	175.4	183.0	190.6	198.2
17: 3	207	1	175.4995	0.04332	7.6026	152.7	160.3	167.9	175.5	183.1	190.7	198.3

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Year: Month	Month	L	M	S	SD	Z-scores (height in cm)						
						-3 SD	-2 SD	-1 SD	Median	1 SD	2 SD	3 SD
17: 4	208	1	175.5959	0.04322	7.5893	152.8	160.4	168.0	175.6	183.2	190.8	198.4
17: 5	209	1	175.6850	0.04311	7.5738	153.0	160.5	168.1	175.7	183.3	190.8	198.4
17: 6	210	1	175.7672	0.04301	7.5597	153.1	160.6	168.2	175.8	183.3	190.9	198.4
17: 7	211	1	175.8432	0.04291	7.5454	153.2	160.8	168.3	175.8	183.4	190.9	198.5
17: 8	212	1	175.9133	0.04281	7.5308	153.3	160.9	168.4	175.9	183.4	191.0	198.5
17: 9	213	1	175.9781	0.04271	7.5160	153.4	160.9	168.5	176.0	183.5	191.0	198.5
17:10	214	1	176.0380	0.04261	7.5010	153.5	161.0	168.5	176.0	183.5	191.0	198.5
17:11	215	1	176.0935	0.04251	7.4857	153.6	161.1	168.6	176.1	183.6	191.1	198.6
18: 0	216	1	176.1449	0.04241	7.4703	153.7	161.2	168.7	176.1	183.6	191.1	198.6
18: 1	217	1	176.1925	0.04232	7.4565	153.8	161.3	168.7	176.2	183.6	191.1	198.6
18: 2	218	1	176.2368	0.04222	7.4407	153.9	161.4	168.8	176.2	183.7	191.1	198.6
18: 3	219	1	176.2779	0.04213	7.4266	154.0	161.4	168.9	176.3	183.7	191.1	198.6
18: 4	220	1	176.3162	0.04204	7.4123	154.1	161.5	168.9	176.3	183.7	191.1	198.6
18: 5	221	1	176.3518	0.04195	7.3980	154.2	161.6	169.0	176.4	183.8	191.1	198.5
18: 6	222	1	176.3851	0.04185	7.3817	154.2	161.6	169.0	176.4	183.8	191.1	198.5
18: 7	223	1	176.4162	0.04177	7.3689	154.3	161.7	169.0	176.4	183.8	191.2	198.5
18: 8	224	1	176.4453	0.04168	7.3542	154.4	161.7	169.1	176.4	183.8	191.2	198.5
18: 9	225	1	176.4724	0.04159	7.3395	154.5	161.8	169.1	176.5	183.8	191.2	198.5
18:10	226	1	176.4976	0.04150	7.3247	154.5	161.8	169.2	176.5	183.8	191.1	198.5
18:11	227	1	176.5211	0.04142	7.3115	154.6	161.9	169.2	176.5	183.8	191.1	198.5
19: 0	228	1	176.5432	0.04134	7.2983	154.6	161.9	169.2	176.5	183.8	191.1	198.4

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