

NEGATIVE z Scores

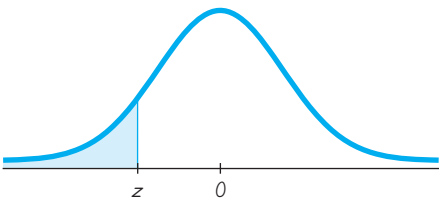
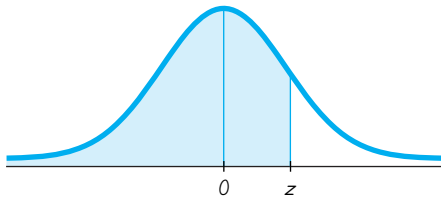


TABLE A-2 Standard Normal (z) Distribution: Cumulative Area from the LEFT										
z	.00	.01	.02	.03	.04	.05	.06	.07	.08	.09
–3.50 and lower	.0001									
–3.4	.0003	.0003	.0003	.0003	.0003	.0003	.0003	.0003	.0003	.0002
–3.3	.0005	.0005	.0005	.0004	.0004	.0004	.0004	.0004	.0004	.0003
–3.2	.0007	.0007	.0006	.0006	.0006	.0006	.0006	.0005	.0005	.0005
–3.1	.0010	.0009	.0009	.0009	.0008	.0008	.0008	.0008	.0007	.0007
–3.0	.0013	.0013	.0013	.0012	.0012	.0011	.0011	.0011	.0010	.0010
–2.9	.0019	.0018	.0018	.0017	.0016	.0016	.0015	.0015	.0014	.0014
–2.8	.0026	.0025	.0024	.0023	.0023	.0022	.0021	.0021	.0020	.0019
–2.7	.0035	.0034	.0033	.0032	.0031	.0030	.0029	.0028	.0027	.0026
–2.6	.0047	.0045	.0044	.0043	.0041	.0040	.0039	.0038	.0037	.0036
–2.5	.0062	.0060	.0059	.0057	.0055	.0054	.0052	.0051	*	.0049
–2.4	.0082	.0080	.0078	.0075	.0073	.0071	.0069	.0068	↑	.0066
–2.3	.0107	.0104	.0102	.0099	.0096	.0094	.0091	.0089		.0087
–2.2	.0139	.0136	.0132	.0129	.0125	.0122	.0119	.0116		.0113
–2.1	.0179	.0174	.0170	.0166	.0162	.0158	.0154	.0150		.0146
–2.0	.0228	.0222	.0217	.0212	.0207	.0202	.0197	.0192		.0188
–1.9	.0287	.0281	.0274	.0268	.0262	.0256	.0250	.0244		.0239
–1.8	.0359	.0351	.0344	.0336	.0329	.0322	.0314	.0307		.0301
–1.7	.0446	.0436	.0427	.0418	.0409	.0401	.0392	.0384		.0375
–1.6	.0548	.0537	.0526	.0516	.0505	*	.0495	.0485		.0475
–1.5	.0668	.0655	.0643	.0630	.0618	↑	.0606	.0594		.0582
–1.4	.0808	.0793	.0778	.0764	.0749		.0735	.0721		.0708
–1.3	.0968	.0951	.0934	.0918	.0901		.0885	.0869		.0853
–1.2	.1151	.1131	.1112	.1093	.1075		.1056	.1038		.1020
–1.1	.1357	.1335	.1314	.1292	.1271		.1251	.1230		.1210
–1.0	.1587	.1562	.1539	.1515	.1492		.1469	.1446		.1423
–0.9	.1841	.1814	.1788	.1762	.1736		.1711	.1685		.1660
–0.8	.2119	.2090	.2061	.2033	.2005		.1977	.1949		.1922
–0.7	.2420	.2389	.2358	.2327	.2296		.2266	.2236		.2206
–0.6	.2743	.2709	.2676	.2643	.2611		.2578	.2546		.2514
–0.5	.3085	.3050	.3015	.2981	.2946		.2912	.2877		.2843
–0.4	.3446	.3409	.3372	.3336	.3300		.3264	.3228		.3192
–0.3	.3821	.3783	.3745	.3707	.3669		.3632	.3594		.3557
–0.2	.4207	.4168	.4129	.4090	.4052		.4013	.3974		.3936
–0.1	.4602	.4562	.4522	.4483	.4443		.4404	.4364		.4325
–0.0	.5000	.4960	.4920	.4880	.4840		.4801	.4761		.4721

NOTE: For values of z below –3.49, use 0.0001 for the area.

*Use these common values that result from interpolation:

z score	Area	
–1.645	0.0500	←
–2.575	0.0050	←



POSITIVE z Scores

TABLE A-2 (continued) Cumulative Area from the LEFT										
z	.00	.01	.02	.03	.04	.05	.06	.07	.08	.09
0.0	.5000	.5040	.5080	.5120	.5160	.5199	.5239	.5279	.5319	.5359
0.1	.5398	.5438	.5478	.5517	.5557	.5596	.5636	.5675	.5714	.5753
0.2	.5793	.5832	.5871	.5910	.5948	.5987	.6026	.6064	.6103	.6141
0.3	.6179	.6217	.6255	.6293	.6331	.6368	.6406	.6443	.6480	.6517
0.4	.6554	.6591	.6628	.6664	.6700	.6736	.6772	.6808	.6844	.6879
0.5	.6915	.6950	.6985	.7019	.7054	.7088	.7123	.7157	.7190	.7224
0.6	.7257	.7291	.7324	.7357	.7389	.7422	.7454	.7486	.7517	.7549
0.7	.7580	.7611	.7642	.7673	.7704	.7734	.7764	.7794	.7823	.7852
0.8	.7881	.7910	.7939	.7967	.7995	.8023	.8051	.8078	.8106	.8133
0.9	.8159	.8186	.8212	.8238	.8264	.8289	.8315	.8340	.8365	.8389
1.0	.8413	.8438	.8461	.8485	.8508	.8531	.8554	.8577	.8599	.8621
1.1	.8643	.8665	.8686	.8708	.8729	.8749	.8770	.8790	.8810	.8830
1.2	.8849	.8869	.8888	.8907	.8925	.8944	.8962	.8980	.8997	.9015
1.3	.9032	.9049	.9066	.9082	.9099	.9115	.9131	.9147	.9162	.9177
1.4	.9192	.9207	.9222	.9236	.9251	.9265	.9279	.9292	.9306	.9319
1.5	.9332	.9345	.9357	.9370	.9382	.9394	.9406	.9418	.9429	.9441
1.6	.9452	.9463	.9474	.9484	.9495	↑ .9505	.9515	.9525	.9535	.9545
1.7	.9554	.9564	.9573	.9582	.9591	↑ .9599	.9608	.9616	.9625	.9633
1.8	.9641	.9649	.9656	.9664	.9671	↑ .9678	.9686	.9693	.9699	.9706
1.9	.9713	.9719	.9726	.9732	.9738	↑ .9744	.9750	.9756	.9761	.9767
2.0	.9772	.9778	.9783	.9788	.9793	↑ .9798	.9803	.9808	.9812	.9817
2.1	.9821	.9826	.9830	.9834	.9838	↑ .9842	.9846	.9850	.9854	.9857
2.2	.9861	.9864	.9868	.9871	.9875	↑ .9878	.9881	.9884	.9887	.9890
2.3	.9893	.9896	.9898	.9901	.9904	↑ .9906	.9909	.9911	.9913	.9916
2.4	.9918	.9920	.9922	.9925	.9927	↑ .9929	.9931	.9932	.9934	.9936
2.5	.9938	.9940	.9941	.9943	.9945	↑ .9946	.9948	.9949	↑ .9951	.9952
2.6	.9953	.9955	.9956	.9957	.9959	↑ .9960	.9961	.9962	↑ .9963	.9964
2.7	.9965	.9966	.9967	.9968	.9969	↑ .9970	.9971	.9972	↑ .9973	.9974
2.8	.9974	.9975	.9976	.9977	.9977	↑ .9978	.9979	.9979	.9980	.9981
2.9	.9981	.9982	.9982	.9983	.9984	↑ .9984	.9985	.9985	.9986	.9986
3.0	.9987	.9987	.9987	.9988	.9988	↑ .9989	.9989	.9989	.9990	.9990
3.1	.9990	.9991	.9991	.9991	.9992	↑ .9992	.9992	.9992	.9993	.9993
3.2	.9993	.9993	.9994	.9994	.9994	↑ .9994	.9994	.9995	.9995	.9995
3.3	.9995	.9995	.9995	.9996	.9996	↑ .9996	.9996	.9996	.9996	.9997
3.4	.9997	.9997	.9997	.9997	.9997	↑ .9997	.9997	.9997	.9997	.9998
3.50 and up	.9999									

NOTE: For values of z above 3.49, use 0.9999 for the area.

*Use these common values that result from interpolation:

z score	Area
1.645	0.9500 ←
2.575	0.9950 ←

Common Critical Values

Confidence Level	Critical Value
0.90	1.645
0.95	1.96
0.99	2.575