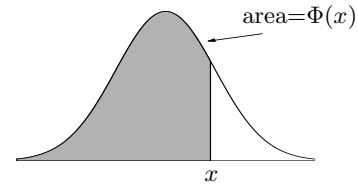


Table 1. Standard normal distribution.

$\Phi(x) = P(X \leq x)$, where $X \in N(0, 1)$.

For a negative x , use that $\Phi(-x) = 1 - \Phi(x)$



x	.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	.97725	.97778	.97831	.97882	.97932	.97982	.98030	.98077	.98124	.98169
2.1	.98214	.98257	.98300	.98341	.98382	.98422	.98461	.98500	.98537	.98574
2.2	.98610	.98645	.98679	.98713	.98745	.98778	.98809	.98840	.98870	.98899
2.3	.98928	.98956	.98983	.99010	.99036	.99061	.99086	.99111	.99134	.99158
2.4	.99180	.99202	.99224	.99245	.99266	.99286	.99305	.99324	.99343	.99361
2.5	.99379	.99396	.99413	.99430	.99446	.99461	.99477	.99492	.99506	.99520
2.6	.99534	.99547	.99560	.99573	.99585	.99598	.99609	.99621	.99632	.99643
2.7	.99653	.99664	.99674	.99683	.99693	.99702	.99711	.99720	.99728	.99736
2.8	.99744	.99752	.99760	.99767	.99774	.99781	.99788	.99795	.99801	.99807
2.9	.99813	.99819	.99825	.99831	.99836	.99841	.99846	.99851	.99856	.99861

Tab 2. Quantiles of the normal distribution

$P(X > \lambda_\alpha) = \alpha$ where $X \in N(0, 1)$

		α	λ_a	α	λ_a
3.5	.99977	0.10	1.2816	0.001	3.0902
3.6	.99984	0.05	1.6449	0.0005	3.2905
3.7	.99989	0.025	1.9600	0.0001	3.7190
3.8	.99993	0.010	2.3263	0.00005	3.8906
3.9	.99995	0.005	2.5758	0.00001	4.2649
4.0	.99997				

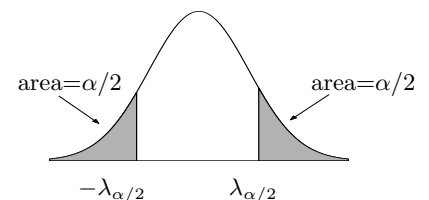
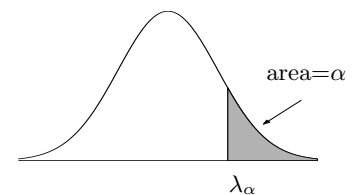
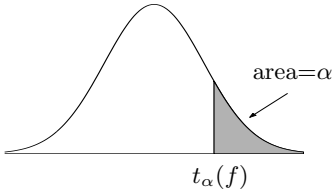


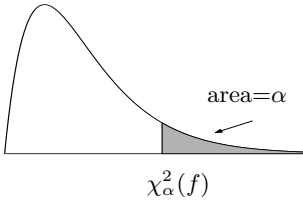
Table 3. *t*-distribution.

$P(X > t_\alpha(f)) = \alpha$, where $X \in t(f)$.



f	α	0.10	0.05	0.025	0.01	0.005	0.001	0.0005
1		3.08	6.31	12.71	31.82	63.66	318.31	636.62
2		1.89	2.92	4.30	6.96	9.92	22.33	31.60
3		1.64	2.35	3.18	4.54	5.84	10.21	12.92
4		1.53	2.13	2.78	3.75	4.60	7.17	8.61
5		1.48	2.02	2.57	3.36	4.03	5.89	6.87
6		1.44	1.94	2.45	3.14	3.71	5.21	5.96
7		1.41	1.89	2.36	3.00	3.50	4.79	5.41
8		1.40	1.86	2.31	2.90	3.36	4.50	5.04
9		1.38	1.83	2.26	2.82	3.25	4.30	4.78
10		1.37	1.81	2.23	2.76	3.17	4.14	4.59
11		1.36	1.80	2.20	2.72	3.11	4.02	4.44
12		1.36	1.78	2.18	2.68	3.05	3.93	4.32
13		1.35	1.77	2.16	2.65	3.01	3.85	4.22
14		1.35	1.76	2.14	2.62	2.98	3.79	4.14
15		1.34	1.75	2.13	2.60	2.95	3.73	4.07
16		1.34	1.75	2.12	2.58	2.92	3.69	4.01
17		1.33	1.74	2.11	2.57	2.90	3.65	3.97
18		1.33	1.73	2.10	2.55	2.88	3.61	3.92
19		1.33	1.73	2.09	2.54	2.86	3.58	3.88
20		1.33	1.72	2.09	2.53	2.85	3.55	3.85
21		1.32	1.72	2.08	2.52	2.83	3.53	3.82
22		1.32	1.72	2.07	2.51	2.82	3.50	3.79
23		1.32	1.71	2.07	2.50	2.81	3.48	3.77
24		1.32	1.71	2.06	2.49	2.80	3.47	3.75
25		1.32	1.71	2.06	2.49	2.79	3.45	3.73
26		1.31	1.71	2.06	2.48	2.78	3.43	3.71
27		1.31	1.70	2.05	2.47	2.77	3.42	3.69
28		1.31	1.70	2.05	2.47	2.76	3.41	3.67
29		1.31	1.70	2.05	2.46	2.76	3.40	3.66
30		1.31	1.70	2.04	2.46	2.75	3.39	3.65
40		1.30	1.68	2.02	2.42	2.70	3.31	3.55
60		1.30	1.67	2.00	2.39	2.66	3.23	3.46
120		1.29	1.66	1.98	2.36	2.62	3.16	3.37
∞		1.28	1.64	1.96	2.33	2.58	3.09	3.29

Table 4. χ^2 -distribution.
 $P(X > \chi^2_\alpha(f)) = \alpha$, where $X \in \chi^2(f)$.



f	α	0.9995	0.999	0.995	0.99	0.975	0.95	0.05	0.025	0.01	0.005	0.001	0.0005
1		0.00	0.00	0.00	0.00	0.00	0.00	3.84	5.02	6.63	7.88	10.8	12.1
2		0.00	0.00	0.01	0.02	0.05	0.10	5.99	7.38	9.21	10.6	13.8	15.2
3		0.02	0.02	0.07	0.11	0.22	0.35	7.81	9.35	11.3	12.8	16.3	17.7
4		0.06	0.09	0.21	0.30	0.48	0.71	9.49	11.1	13.3	14.9	18.5	20.0
5		0.16	0.21	0.41	0.55	0.83	1.15	11.1	12.8	15.1	16.7	20.5	22.1
6		0.30	0.38	0.68	0.87	1.24	1.64	12.6	14.4	16.8	18.5	22.5	24.1
7		0.48	0.60	0.99	1.24	1.69	2.17	14.1	16.0	18.5	20.3	24.3	26.0
8		0.71	0.86	1.34	1.65	2.18	2.73	15.5	17.5	20.1	22.0	26.1	27.9
9		0.97	1.15	1.73	2.09	2.70	3.33	16.9	19.0	21.7	23.6	27.9	29.7
10		1.26	1.48	2.16	2.56	3.25	3.94	18.3	20.5	23.2	25.2	29.6	31.4
11		1.59	1.83	2.60	3.05	3.82	4.57	19.7	21.9	24.7	26.8	31.3	33.1
12		1.93	2.21	3.07	3.57	4.40	5.23	21.0	23.3	26.2	28.3	32.9	34.8
13		2.31	2.62	3.57	4.11	5.01	5.89	22.4	24.7	27.7	29.8	34.5	36.5
14		2.70	3.04	4.07	4.66	5.63	6.57	23.7	26.1	29.1	31.3	36.1	38.1
15		3.11	3.48	4.60	5.23	6.26	7.26	25.0	27.5	30.6	32.8	37.7	39.7
16		3.54	3.94	5.14	5.81	6.91	7.96	26.3	28.8	32.0	34.3	39.3	41.3
17		3.98	4.42	5.70	6.41	7.56	8.67	27.6	30.2	33.4	35.7	40.8	42.9
18		4.44	4.90	6.26	7.01	8.23	9.39	28.9	31.5	34.8	37.2	42.3	44.4
19		4.91	5.41	6.84	7.63	8.91	10.1	30.1	32.9	36.2	38.6	43.8	46.0
20		5.40	5.92	7.43	8.26	9.59	10.9	31.4	34.2	37.6	40.0	45.3	47.5
21		5.90	6.45	8.03	8.90	10.3	11.6	32.7	35.5	38.9	41.4	46.8	49.0
22		6.40	6.98	8.64	9.54	11.0	12.3	33.9	36.8	40.3	42.8	48.3	50.5
23		6.92	7.53	9.26	10.2	11.7	13.1	35.2	38.1	41.6	44.2	49.7	52.0
24		7.45	8.08	9.89	10.9	12.4	13.8	36.4	39.4	43.0	45.6	51.2	53.5
25		7.99	8.65	10.5	11.5	13.1	14.6	37.7	40.6	44.3	46.9	52.6	54.9
26		8.54	9.22	11.2	12.2	13.8	15.4	38.9	41.9	45.6	48.3	54.1	56.4
27		9.09	9.80	11.8	12.9	14.6	16.2	40.1	43.2	47.0	49.6	55.5	57.9
28		9.66	10.4	12.5	13.6	15.3	16.9	41.3	44.5	48.3	51.0	56.9	59.3
29		10.2	11.0	13.1	14.3	16.0	17.7	42.6	45.7	49.6	52.3	58.3	60.7
30		10.8	11.6	13.8	15.0	16.8	18.5	43.8	47.0	50.9	53.7	59.7	62.2
40		16.9	17.9	20.7	22.2	24.4	26.5	55.8	59.3	63.7	66.8	73.4	76.1
50		23.5	24.7	28.0	29.7	32.4	34.8	67.5	71.4	76.2	79.5	86.7	89.6
60		30.3	31.7	35.5	37.5	40.5	43.2	79.1	83.3	88.4	92.0	99.6	103
70		37.5	39.0	43.3	45.4	48.8	51.7	90.5	95.0	100	104	112	116
80		44.8	46.5	51.2	53.5	57.2	60.4	102	107	112	116	125	128
90		52.3	54.2	59.2	61.8	65.6	69.1	113	118	124	128	137	141
100		59.9	61.9	67.3	70.1	74.2	77.9	124	130	136	140	149	153

$$P(X \leq x) \text{ where } X \in \text{Po}(\mu).$$
[illegible]

Table 5 cont

[illegible]

Table 5 cont

[illegible]

Table 6. Binomial distribution $P(X \leq x)$ where $X \in \text{Bin}(n, p)$.For $p > .5$ use that $P(X \leq x) = P(Y \geq n - x)$ where $Y \in \text{Bin}(n, 1 - p)$

n	x	p	0.05	0.10	0.15	0.20	0.25	0.30	0.40	0.50
2	0		.90250	.81000	.72250	.64000	.56250	.49000	.36000	.25000
	1		.99750	.99000	.97750	.96000	.93750	.91000	.84000	.75000
3	0		.85737	.72900	.61412	.51200	.42188	.34300	.21600	.12500
	1		.99275	.97200	.93925	.89600	.84375	.78400	.64800	.50000
	2		.99987	.99900	.99662	.99200	.98438	.97300	.93600	.87500
4	0		.81451	.65610	.52201	.40960	.31641	.24010	.12960	.06250
	1		.98598	.94770	.89048	.81920	.73828	.65170	.47520	.31250
	2		.99952	.99630	.98802	.97280	.94922	.91630	.82080	.68750
	3		.99999	.99990	.99949	.99840	.99609	.99190	.97440	.93750
5	0		.77378	.59049	.44371	.32768	.23730	.16807	.07776	.03125
	1		.97741	.91854	.83521	.73728	.63281	.52822	.33696	.18750
	2		.99884	.99144	.97339	.94208	.89648	.83692	.68256	.50000
	3		.99997	.99954	.99777	.99328	.98438	.96922	.91296	.81250
	4		1.00000	.99999	.99992	.99968	.99902	.99757	.98976	.96875
6	0		.73509	.53144	.37715	.26214	.17798	.11765	.04666	.01562
	1		.96723	.88574	.77648	.65536	.53394	.42017	.23328	.10938
	2		.99777	.98415	.95266	.90112	.83057	.74431	.54432	.34375
	3		.99991	.99873	.99411	.98304	.96240	.92953	.82080	.65625
	4		1.00000	.99995	.99960	.99840	.99536	.98906	.95904	.89063
	5		1.00000	1.00000	.99999	.99994	.99976	.99927	.99590	.98438
7	0		.69834	.47830	.32058	.20972	.13348	.08235	.02799	.00781
	1		.95562	.85031	.71658	.57672	.44495	.32942	.15863	.06250
	2		.99624	.97431	.92623	.85197	.75641	.64707	.41990	.22656
	3		.99981	.99727	.98790	.96666	.92944	.87396	.71021	.50000
	4		.99999	.99982	.99878	.99533	.98712	.97120	.90374	.77344
	5		1.00000	.99999	.99993	.99963	.99866	.99621	.98116	.93750
	6		1.00000	1.00000	1.00000	.99999	.99994	.99978	.99836	.99219
8	0		.66342	.43047	.27249	.16777	.10011	.05765	.01680	.00391
	1		.94276	.81310	.65718	.50332	.36708	.25530	.10638	.03516
	2		.99421	.96191	.89479	.79692	.67854	.55177	.31539	.14453
	3		.99963	.99498	.97865	.94372	.88618	.80590	.59409	.36328
	4		.99998	.99957	.99715	.98959	.97270	.94203	.82633	.63672
	5		1.00000	.99998	.99976	.99877	.99577	.98871	.95019	.85547
	6		1.00000	1.00000	.99999	.99992	.99962	.99871	.99148	.96484
	7		1.00000	1.00000	1.00000	1.00000	.99998	.99993	.99934	.99609
9	0		.63025	.38742	.23162	.13422	.07508	.04035	.01008	.00195
	1		.92879	.77484	.59948	.43621	.30034	.19600	.07054	.01953
	2		.99164	.94703	.85915	.73820	.60068	.46283	.23179	.08984
	3		.99936	.99167	.96607	.91436	.83427	.72966	.48261	.25391
	4		.99997	.99911	.99437	.98042	.95107	.90119	.73343	.50000
	5		1.00000	.99994	.99937	.99693	.99001	.97471	.90065	.74609
	6		1.00000	1.00000	.99995	.99969	.99866	.99571	.97497	.91016
	7		1.00000	1.00000	1.00000	.99998	.99989	.99957	.99620	.98047
	8		1.00000	1.00000	1.00000	1.00000	1.00000	.99998	.99974	.99805

n	x	p	0.05	0.10	0.15	0.20	0.25	0.30	0.40	0.50
10	0		.59874	.34868	.19687	.10737	.05631	.02825	.00605	.00098
	1		.91386	.73610	.54430	.37581	.24403	.14931	.04636	.01074
	2		.98850	.92981	.82020	.67780	.52559	.38278	.16729	.05469
	3		.99897	.98720	.95003	.87913	.77588	.64961	.38228	.17188
	4		.99994	.99837	.99013	.96721	.92187	.84973	.63310	.37695
	5		1.00000	.99985	.99862	.99363	.98027	.95265	.83376	.62305
	6		1.00000	.99999	.99987	.99914	.99649	.98941	.94524	.82813
	7		1.00000	1.00000	.99999	.99992	.99958	.99841	.98771	.94531
	8		1.00000	1.00000	1.00000	1.00000	.99997	.99986	.99832	.98926
	9		1.00000	1.00000	1.00000	1.00000	1.00000	.99999	.99990	.99902
11	0		.56880	.31381	.16734	.08590	.04224	.01977	.00363	.00049
	1		.89811	.69736	.49219	.32212	.19710	.11299	.03023	.00586
	2		.98476	.91044	.77881	.61740	.45520	.31274	.11892	.03271
	3		.99845	.98147	.93056	.83886	.71330	.56956	.29628	.11328
	4		.99989	.99725	.98411	.94959	.88537	.78970	.53277	.27441
	5		.99999	.99970	.99734	.98835	.96567	.92178	.75350	.50000
	6		1.00000	.99998	.99968	.99803	.99244	.97838	.90065	.72559
	7		1.00000	1.00000	.99997	.99976	.99881	.99571	.97072	.88672
	8		1.00000	1.00000	1.00000	.99998	.99987	.99942	.99408	.96729
	9		1.00000	1.00000	1.00000	1.00000	.99999	.99995	.99927	.99414
	10		1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	.99996	.99951
12	0		.54036	.28243	.14224	.06872	.03168	.01384	.00218	.00024
	1		.88164	.65900	.44346	.27488	.15838	.08503	.01959	.00317
	2		.98043	.88913	.73582	.55835	.39068	.25282	.08344	.01929
	3		.99776	.97436	.90779	.79457	.64878	.49252	.22534	.07300
	4		.99982	.99567	.97608	.92744	.84236	.72366	.43818	.19385
	5		.99999	.99946	.99536	.98059	.94560	.88215	.66521	.38721
	6		1.00000	.99995	.99933	.99610	.98575	.96140	.84179	.61279
	7		1.00000	1.00000	.99993	.99942	.99722	.99051	.94269	.80615
	8		1.00000	1.00000	.99999	.99994	.99961	.99831	.98473	.92700
	9		1.00000	1.00000	1.00000	1.00000	.99996	.99979	.99719	.98071
	10		1.00000	1.00000	1.00000	1.00000	1.00000	.99998	.99968	.99683
	11		1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	.99998	.99976
13	0		.51334	.25419	.12091	.05498	.02376	.00969	.00131	.00012
	1		.86458	.62134	.39828	.23365	.12671	.06367	.01263	.00171
	2		.97549	.86612	.69196	.50165	.33260	.20248	.05790	.01123
	3		.99690	.96584	.88200	.74732	.58425	.42061	.16858	.04614
	4		.99971	.99354	.96584	.90087	.79396	.65431	.35304	.13342
	5		.99998	.99908	.99247	.96996	.91979	.83460	.57440	.29053
	6		1.00000	.99990	.99873	.99300	.97571	.93762	.77116	.50000
	7		1.00000	.99999	.99984	.99875	.99435	.98178	.90233	

NOMOGRAM OF THE BINOMIAL DISTRIBUTION

$P = P(X \leq c)$ where $X \in \text{Bin}(n, p)$; X = number of successful trials

