

Tabeller

Tabell 1. *Det grekiska alfabetet*

alfa	A	α	iota	I	ι	rho	P	ρ, ϱ
beta	B	β	kappa	K	κ	sigma	Σ	σ, ς
gamma	Γ	γ	lambda	Λ	λ	tau	T	τ
delta	Δ	δ	my	M	μ	ypsilon	Y	υ
epsilon	E	ϵ, ε	ny	N	ν	fi	Φ	ϕ, φ
zeta	Z	ζ	xi	Ξ	ξ	chi	X	χ
eta	H	η	omikron	O	o	psi	Ψ	ψ
theta	Θ	θ, ϑ	pi	Π	π	omega	Ω	ω

Tabell 2. Binomialfördelningen

Tabellen ger $F(k) = P(X \leq k)$ då $X \sim \text{Bin}(n, p)$, för $0.05 \leq p \leq 0.5$.

För $p > 0.5$ utnyttjas att $Y := n - X \sim \text{Bin}(n, 1 - p)$.

n	$k \backslash p$	0.05	0.1	0.15	0.2	0.25	0.3	0.4	0.5
2	0	0.9025	0.8100	0.7225	0.6400	0.5625	0.4900	0.3600	0.2500
	1	0.9975	0.9900	0.9775	0.9600	0.9375	0.9100	0.8400	0.7500
3	0	0.8574	0.7290	0.6141	0.5120	0.4219	0.3430	0.2160	0.1250
	1	0.9928	0.9720	0.9392	0.8960	0.8438	0.7840	0.6480	0.5000
	2	0.9999	0.9990	0.9966	0.9920	0.9844	0.9730	0.9360	0.8750
4	0	0.8145	0.6561	0.5220	0.4096	0.3164	0.2401	0.1296	0.0625
	1	0.9860	0.9477	0.8905	0.8192	0.7383	0.6517	0.4752	0.3125
	2	0.9995	0.9963	0.9880	0.9728	0.9492	0.9163	0.8208	0.6875
	3	1.0000	0.9999	0.9995	0.9984	0.9961	0.9919	0.9744	0.9375
5	0	0.7738	0.5905	0.4437	0.3277	0.2373	0.1681	0.0778	0.0312
	1	0.9774	0.9185	0.8352	0.7373	0.6328	0.5282	0.3367	0.1875
	2	0.9988	0.9914	0.9734	0.9421	0.8965	0.8369	0.6826	0.5000
	3	1.0000	0.9995	0.9978	0.9933	0.9844	0.9692	0.9130	0.8125
	4	1.0000	1.0000	0.9999	0.9997	0.9990	0.9976	0.9898	0.9688
6	0	0.7351	0.5314	0.3772	0.2621	0.1780	0.1176	0.0467	0.0156
	1	0.9672	0.8857	0.7765	0.6554	0.5339	0.4202	0.2333	0.1094
	2	0.9978	0.9842	0.9527	0.9011	0.8306	0.7443	0.5443	0.3438
	3	0.9999	0.9987	0.9941	0.9830	0.9624	0.9295	0.8208	0.6562
	4	1.0000	1.0000	0.9996	0.9984	0.9954	0.9891	0.9590	0.8906
	5	1.0000	1.0000	1.0000	0.9999	0.9998	0.9993	0.9959	0.9844
7	0	0.6983	0.4783	0.3206	0.2097	0.1335	0.0824	0.0280	0.0078
	1	0.9556	0.8503	0.7166	0.5767	0.4449	0.3294	0.1586	0.0625
	2	0.9962	0.9743	0.9262	0.8520	0.7564	0.6471	0.4199	0.2266
	3	0.9998	0.9973	0.9879	0.9667	0.9294	0.8740	0.7102	0.5000
	4	1.0000	0.9998	0.9988	0.9953	0.9871	0.9712	0.9037	0.7734
	5	1.0000	1.0000	0.9999	0.9996	0.9987	0.9962	0.9812	0.9375
	6	1.0000	1.0000	1.0000	1.0000	0.9999	0.9998	0.9984	0.9922
8	0	0.6634	0.4305	0.2725	0.1678	0.1001	0.0576	0.0168	0.0039
	1	0.9428	0.8131	0.6572	0.5033	0.3671	0.2553	0.1064	0.0352
	2	0.9942	0.9619	0.8948	0.7969	0.6785	0.5518	0.3154	0.1445
	3	0.9996	0.9950	0.9786	0.9437	0.8862	0.8059	0.5941	0.3633
	4	1.0000	0.9996	0.9971	0.9896	0.9727	0.9420	0.8263	0.6367
	5	1.0000	1.0000	0.9998	0.9988	0.9958	0.9887	0.9502	0.8555
	6	1.0000	1.0000	1.0000	0.9999	0.9996	0.9987	0.9915	0.9648
	7	1.0000	1.0000	1.0000	1.0000	1.0000	0.9999	0.9993	0.9961

Tabell 4. Normalfördelningens fördelningsfunktion, $\Phi(t)$

Tabellen ger $\Phi(t) = P(X \leq t)$ då $X \sim N(0, 1)$, för $0 \leq t \leq 3.9$.

För $t < 0$ utnyttjas att $\Phi(-t) = 1 - \Phi(t)$.

För stora t kan man utnyttja approximationen $1 - \Phi(t) \approx \varphi(t)/t$,

där $\varphi(t) = \frac{1}{\sqrt{2\pi}}e^{-t^2/2}$.

t	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
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	.9 ³ 03	.9 ³ 06	.9 ³ 10	.9 ³ 13	.9 ³ 16	.9 ³ 18	.9 ³ 21	.9 ³ 24	.9 ³ 26	.9 ³ 29
3.2	.9 ³ 31	.9 ³ 34	.9 ³ 36	.9 ³ 38	.9 ³ 40	.9 ³ 42	.9 ³ 44	.9 ³ 46	.9 ³ 48	.9 ³ 50
3.3	.9 ³ 52	.9 ³ 53	.9 ³ 55	.9 ³ 57	.9 ³ 58	.9 ³ 60	.9 ³ 61	.9 ³ 62	.9 ³ 64	.9 ³ 65
3.4	.9 ³ 66	.9 ³ 68	.9 ³ 69	.9 ³ 70	.9 ³ 71	.9 ³ 72	.9 ³ 73	.9 ³ 74	.9 ³ 75	.9 ³ 76
3.5	.9 ³ 77	.9 ³ 78	.9 ³ 78	.9 ³ 79	.9 ³ 80	.9 ³ 81	.9 ³ 81	.9 ³ 82	.9 ³ 83	.9 ³ 83
3.6	.9 ³ 84	.9 ³ 85	.9 ³ 85	.9 ³ 86	.9 ³ 86	.9 ³ 87	.9 ³ 87	.9 ³ 88	.9 ³ 88	.9 ³ 89
3.7	.9 ³ 89	.9 ³ 90	.9 ⁴ 00	.9 ⁴ 04	.9 ⁴ 08	.9 ⁴ 12	.9 ⁴ 15	.9 ⁴ 18	.9 ⁴ 22	.9 ⁴ 25
3.8	.9 ⁴ 28	.9 ⁴ 31	.9 ⁴ 33	.9 ⁴ 36	.9 ⁴ 38	.9 ⁴ 41	.9 ⁴ 43	.9 ⁴ 46	.9 ⁴ 48	.9 ⁴ 50
3.9	.9 ⁴ 52	.9 ⁴ 54	.9 ⁴ 56	.9 ⁴ 58	.9 ⁴ 59	.9 ⁴ 61	.9 ⁴ 63	.9 ⁴ 64	.9 ⁴ 66	.9 ⁴ 67
4.0	.9 ⁴ 68	.9 ⁴ 70	.9 ⁴ 71	.9 ⁴ 72	.9 ⁴ 73	.9 ⁴ 74	.9 ⁴ 75	.9 ⁴ 76	.9 ⁴ 77	.9 ⁴ 78

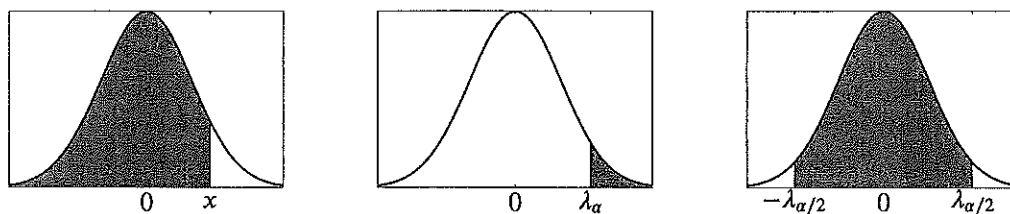
Ex. .9⁴68=0.999968

Tabell 5. Normalfördelningens kvantiler, λ_α

Tabellen ger λ_α för $\alpha \leq 0.5$, där λ_α definieras av att $\Phi(\lambda_\alpha) = 1 - \alpha$, eller alternativt att $P(X > \lambda_\alpha) = \alpha$ då $X \sim N(0, 1)$.

För $\alpha > 0.5$ utnyttjas att $\lambda_\alpha = -\lambda_{1-\alpha}$.

α	λ_α
0.5	0.0000
0.4	0.2533
0.3	0.5244
0.25	0.6745
0.2	0.8416
0.15	1.0364
0.1	1.2816
0.05	1.6449
0.025	1.9600
0.01	2.3263
0.005	2.5758
0.001	3.0902
0.0005	3.2905
0.0001	3.7190
0.00005	3.8906



Figur 1. Areal till vänster om x är $\Phi(x)$, arean till höger om λ_α är α och arean mellan $-\lambda_{\alpha/2}$ och $\lambda_{\alpha/2}$ är $1 - \alpha$.

Tabell 6. *t*-fördelningens kvantiler, $t_{\alpha}(f)$

$f \backslash \alpha$	0.10	0.05	0.025	0.01	0.005	0.001	0.0005
1	3.0777	6.3138	12.7062	31.8205	63.6567	318.309	636.619
2	1.8856	2.9200	4.3027	6.9646	9.9248	22.3271	31.5991
3	1.6377	2.3534	3.1824	4.5407	5.8409	10.2145	12.9240
4	1.5332	2.1318	2.7764	3.7469	4.6041	7.1732	8.6103
5	1.4759	2.0150	2.5706	3.3649	4.0321	5.8934	6.8688
6	1.4398	1.9432	2.4469	3.1427	3.7074	5.2076	5.9588
7	1.4149	1.8946	2.3646	2.9980	3.4995	4.7853	5.4079
8	1.3968	1.8595	2.3060	2.8965	3.3554	4.5008	5.0413
9	1.3830	1.8331	2.2622	2.8214	3.2498	4.2968	4.7809
10	1.3722	1.8125	2.2281	2.7638	3.1693	4.1437	4.5869
11	1.3634	1.7959	2.2010	2.7181	3.1058	4.0247	4.4370
12	1.3562	1.7823	2.1788	2.6810	3.0545	3.9296	4.3178
13	1.3502	1.7709	2.1604	2.6503	3.0123	3.8520	4.2208
14	1.3450	1.7613	2.1448	2.6245	2.9768	3.7874	4.1405
15	1.3406	1.7531	2.1314	2.6025	2.9467	3.7328	4.0728
16	1.3368	1.7459	2.1199	2.5835	2.9208	3.6862	4.0150
17	1.3334	1.7396	2.1098	2.5669	2.8982	3.6458	3.9651
18	1.3304	1.7341	2.1009	2.5524	2.8784	3.6105	3.9216
19	1.3277	1.7291	2.0930	2.5395	2.8609	3.5794	3.8834
20	1.3253	1.7247	2.0860	2.5280	2.8453	3.5518	3.8495
21	1.3232	1.7207	2.0796	2.5176	2.8314	3.5272	3.8193
22	1.3212	1.7171	2.0739	2.5083	2.8188	3.5050	3.7921
23	1.3195	1.7139	2.0687	2.4999	2.8073	3.4850	3.7676
24	1.3178	1.7109	2.0639	2.4922	2.7969	3.4668	3.7454
25	1.3163	1.7081	2.0595	2.4851	2.7874	3.4502	3.7251
26	1.3150	1.7056	2.0555	2.4786	2.7787	3.4350	3.7066
27	1.3137	1.7033	2.0518	2.4727	2.7707	3.4210	3.6896
28	1.3125	1.7011	2.0484	2.4671	2.7633	3.4082	3.6739
29	1.3114	1.6991	2.0452	2.4620	2.7564	3.3962	3.6594
30	1.3104	1.6973	2.0423	2.4573	2.7500	3.3852	3.6460
35	1.3062	1.6896	2.0301	2.4377	2.7238	3.3400	3.5911
40	1.3031	1.6839	2.0211	2.4233	2.7045	3.3069	3.5510
45	1.3006	1.6794	2.0141	2.4121	2.6896	3.2815	3.5203
50	1.2987	1.6759	2.0086	2.4033	2.6778	3.2614	3.4960
60	1.2958	1.6706	2.0003	2.3901	2.6603	3.2317	3.4602
70	1.2938	1.6669	1.9944	2.3808	2.6479	3.2108	3.4350
80	1.2922	1.6641	1.9901	2.3739	2.6387	3.1953	3.4163
100	1.2901	1.6602	1.9840	2.3642	2.6259	3.1737	3.3905
120	1.2886	1.6577	1.9799	2.3578	2.6174	3.1595	3.3735
∞	1.2816	1.6449	1.9600	2.3263	2.5758	3.0902	3.2905

Tabell 7. χ^2 -fördelningens kvantiler, $\chi^2_\alpha(f)$

$f \backslash \alpha$	0.9995	0.999	0.995	0.99	0.975	0.95	0.9	0.75	0.5
1	0.0 ⁶ 39	0.0 ⁵ 16	0. ⁴ 39	0.0 ³ 16	0.0 ³ 98	0.0039	0.0158	0.1015	0.4549
2	0.0010	0.0020	0.0100	0.0201	0.0506	0.1026	0.2107	0.5754	1.3863
3	0.0153	0.0243	0.0717	0.1148	0.2158	0.3518	0.5844	1.2125	2.3660
4	0.0639	0.0908	0.2070	0.2971	0.4844	0.7107	1.0636	1.9226	3.3567
5	0.1581	0.2102	0.4117	0.5543	0.8312	1.1455	1.6103	2.6746	4.3515
6	0.2994	0.3811	0.6757	0.8721	1.2373	1.6354	2.2041	3.4546	5.3481
7	0.4849	0.5985	0.9893	1.2390	1.6899	2.1673	2.8331	4.2549	6.3458
8	0.7104	0.8571	1.3444	1.6465	2.1797	2.7326	3.4895	5.0706	7.3441
9	0.9717	1.1519	1.7349	2.0879	2.7004	3.3251	4.1682	5.8988	8.3428
10	1.2650	1.4787	2.1559	2.5582	3.2470	3.9403	4.8652	6.7372	9.3418
11	1.5868	1.8339	2.6032	3.0535	3.8157	4.5748	5.5778	7.5841	10.341
12	1.9344	2.2142	3.0738	3.5706	4.4038	5.2260	6.3038	8.4384	11.340
13	2.3051	2.6172	3.5650	4.1069	5.0088	5.8919	7.0415	9.2991	12.340
14	2.6967	3.0407	4.0747	4.6604	5.6287	6.5706	7.7895	10.165	13.339
15	3.1075	3.4827	4.6009	5.2293	6.2621	7.2609	8.5468	11.037	14.339
16	3.5358	3.9416	5.1422	5.8122	6.9077	7.9616	9.3122	11.912	15.338
17	3.9802	4.4161	5.6972	6.4078	7.5642	8.6718	10.085	12.792	16.338
18	4.4394	4.9048	6.2648	7.0149	8.2307	9.3905	10.865	13.675	17.338
19	4.9123	5.4068	6.8440	7.6327	8.9065	10.117	11.651	14.562	18.338
20	5.3981	5.9210	7.4338	8.2604	9.5908	10.851	12.443	15.452	19.337
21	5.8957	6.4467	8.0337	8.8972	10.283	11.591	13.240	16.344	20.337
22	6.4045	6.9830	8.6427	9.5425	10.982	12.338	14.041	17.240	21.337
23	6.9237	7.5292	9.2604	10.196	11.689	13.091	14.848	18.137	22.337
24	7.4527	8.0849	9.8862	10.856	12.401	13.848	15.659	19.037	23.337
25	7.9910	8.6493	10.520	11.524	13.120	14.611	16.473	19.939	24.337
26	8.5379	9.2221	11.160	12.198	13.844	15.379	17.292	20.843	25.336
27	9.0932	9.8028	11.808	12.879	14.573	16.151	18.114	21.749	26.336
28	9.6563	10.391	12.461	13.565	15.308	16.928	18.939	22.657	27.336
29	10.227	10.986	13.121	14.256	16.047	17.708	19.768	23.567	28.336
30	10.804	11.588	13.787	14.953	16.791	18.493	20.599	24.478	29.336
35	13.787	14.688	17.192	18.509	20.569	22.465	24.797	29.054	34.336
40	16.906	17.916	20.707	22.164	24.433	26.509	29.051	33.660	39.335
45	20.137	21.251	24.311	25.901	28.366	30.612	33.350	38.291	44.335
50	23.461	24.674	27.991	29.707	32.357	34.764	37.689	42.942	49.335
60	30.340	31.738	35.534	37.485	40.482	43.188	46.459	52.294	59.335
70	37.467	39.036	43.275	45.442	48.758	51.739	55.329	61.698	69.334
80	44.791	46.520	51.172	53.540	57.153	60.391	64.278	71.145	79.334
90	52.276	54.155	59.196	61.754	65.647	69.126	73.291	80.625	89.334
100	59.896	61.918	67.328	70.065	74.222	77.929	82.358	90.133	99.334

Ex. $0.0^639=0.000\ 000\ 39$

χ^2 -fördelningens kvantiler, $\chi^2_\alpha(f)$, forts.

$f \backslash \alpha$	0.25	0.10	0.05	0.025	0.01	0.005	0.001	0.0005
1	1.3233	2.7055	3.8415	5.0239	6.6349	7.8794	10.828	12.116
2	2.7726	4.6052	5.9915	7.3778	9.2103	10.597	13.816	15.202
3	4.1083	6.2514	7.8147	9.3484	11.345	12.838	16.266	17.730
4	5.3853	7.7794	9.4877	11.143	13.277	14.860	18.467	19.997
5	6.6257	9.2364	11.070	12.833	15.086	16.750	20.515	22.105
6	7.8408	10.645	12.592	14.449	16.812	18.548	22.458	24.103
7	9.0371	12.017	14.067	16.013	18.475	20.278	24.322	26.018
8	10.219	13.362	15.507	17.535	20.090	21.955	26.124	27.868
9	11.389	14.684	16.919	19.023	21.666	23.589	27.877	29.666
10	12.549	15.987	18.307	20.483	23.209	25.188	29.588	31.420
11	13.701	17.275	19.675	21.920	24.725	26.757	31.264	33.137
12	14.845	18.549	21.026	23.337	26.217	28.300	32.909	34.821
13	15.984	19.812	22.362	24.736	27.688	29.819	34.528	36.478
14	17.117	21.064	23.685	26.119	29.141	31.319	36.123	38.109
15	18.245	22.307	24.996	27.488	30.578	32.801	37.697	39.719
16	19.369	23.542	26.296	28.845	32.000	34.267	39.252	41.308
17	20.489	24.769	27.587	30.191	33.409	35.718	40.790	42.879
18	21.605	25.989	28.869	31.526	34.805	37.156	42.312	44.434
19	22.718	27.204	30.144	32.852	36.191	38.582	43.820	45.973
20	23.828	28.412	31.410	34.170	37.566	39.997	45.315	47.498
21	24.935	29.615	32.671	35.479	38.932	41.401	46.797	49.011
22	26.039	30.813	33.924	36.781	40.289	42.796	48.268	50.511
23	27.141	32.007	35.172	38.076	41.638	44.181	49.728	52.000
24	28.241	33.196	36.415	39.364	42.980	45.559	51.179	53.479
25	29.339	34.382	37.652	40.646	44.314	46.928	52.620	54.947
26	30.435	35.563	38.885	41.923	45.642	48.290	54.052	56.407
27	31.528	36.741	40.113	43.195	46.963	49.645	55.476	57.858
28	32.620	37.916	41.337	44.461	48.278	50.993	56.892	59.300
29	33.711	39.087	42.557	45.722	49.588	52.336	58.301	60.735
30	34.800	40.256	43.773	46.979	50.892	53.672	59.703	62.162
35	40.223	46.059	49.802	53.203	57.342	60.275	66.619	69.199
40	45.616	51.805	55.758	59.342	63.691	66.766	73.402	76.095
45	50.985	57.505	61.656	65.410	69.957	73.166	80.077	82.876
50	56.334	63.167	67.505	71.420	76.154	79.490	86.661	89.561
60	66.981	74.397	79.082	83.298	88.379	91.952	99.607	102.69
70	77.577	85.527	90.531	95.023	100.43	104.21	112.32	115.58
80	88.130	96.578	101.88	106.63	112.33	116.32	124.84	128.26
90	98.650	107.57	113.15	118.14	124.12	128.30	137.21	140.78
100	109.14	118.50	124.34	129.56	135.81	140.17	149.45	153.17
110	119.61	129.39	135.48	140.92	147.41	151.95	161.58	165.44
120	130.05	140.23	146.57	152.21	158.95	163.65	173.62	177.60

