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## 標準正規分布表 1

上側  $\varepsilon$  点  $u(\varepsilon)$  から確率  $\varepsilon$  を求める表

ex:  $P(x > 0.25) = 0.4013$

	*=0	*=1	*=2	*=3	*=4	*=5	*=6	*=7	*=8	*=9
0.0*	0.5000	0.4960	0.4920	0.4880	0.4840	0.4801	0.4761	0.4721	0.4681	0.4641
0.1*	0.4602	0.4562	0.4522	0.4483	0.4443	0.4404	0.4364	0.4325	0.4286	0.4247
0.2*	0.4207	0.4168	0.4129	0.4090	0.4052	0.4013	0.3974	0.3936	0.3897	0.3859
0.3*	0.3821	0.3783	0.3745	0.3707	0.3669	0.3632	0.3594	0.3557	0.3520	0.3483
0.4*	0.3446	0.3409	0.3372	0.3336	0.3300	0.3264	0.3228	0.3192	0.3156	0.3121
0.5*	0.3085	0.3050	0.3015	0.2981	0.2946	0.2912	0.2877	0.2843	0.2810	0.2776
0.6*	0.2743	0.2709	0.2676	0.2643	0.2611	0.2578	0.2546	0.2514	0.2483	0.2451
0.7*	0.2420	0.2389	0.2358	0.2327	0.2296	0.2266	0.2236	0.2206	0.2177	0.2148
0.8*	0.2119	0.2090	0.2061	0.2033	0.2005	0.1977	0.1949	0.1922	0.1894	0.1867
0.9*	0.1841	0.1814	0.1788	0.1762	0.1736	0.1711	0.1685	0.1660	0.1635	0.1611
1.0*	0.1587	0.1562	0.1539	0.1515	0.1492	0.1469	0.1446	0.1423	0.1401	0.1379
1.1*	0.1357	0.1335	0.1314	0.1292	0.1271	0.1251	0.1230	0.1210	0.1190	0.1170
1.2*	0.1151	0.1131	0.1112	0.1093	0.1075	0.1056	0.1038	0.1020	0.1003	0.0985
1.3*	0.0968	0.0951	0.0934	0.0918	0.0901	0.0885	0.0869	0.0853	0.0838	0.0823
1.4*	0.0808	0.0793	0.0778	0.0764	0.0749	0.0735	0.0721	0.0708	0.0694	0.0681
1.5*	0.0668	0.0655	0.0643	0.0630	0.0618	0.0606	0.0594	0.0582	0.0571	0.0559
1.6*	0.0548	0.0537	0.0526	0.0516	0.0505	0.0495	0.0485	0.0475	0.0465	0.0455
1.7*	0.0446	0.0436	0.0427	0.0418	0.0409	0.0401	0.0392	0.0384	0.0375	0.0367
1.8*	0.0359	0.0351	0.0344	0.0336	0.0329	0.0322	0.0314	0.0307	0.0301	0.0294
1.9*	0.0287	0.0281	0.0274	0.0268	0.0262	0.0256	0.0250	0.0244	0.0239	0.0233
2.0*	0.0228	0.0222	0.0217	0.0212	0.0207	0.0202	0.0197	0.0192	0.0188	0.0183
2.1*	0.0179	0.0174	0.0170	0.0166	0.0162	0.0158	0.0154	0.0150	0.0146	0.0143
2.2*	0.0139	0.0136	0.0132	0.0129	0.0125	0.0122	0.0119	0.0116	0.0113	0.0110
2.3*	0.0107	0.0104	0.0102	0.0099	0.0096	0.0094	0.0091	0.0089	0.0087	0.0084
2.4*	0.0082	0.0080	0.0078	0.0075	0.0073	0.0071	0.0069	0.0068	0.0066	0.0064
2.5*	0.0062	0.0060	0.0059	0.0057	0.0055	0.0054	0.0052	0.0051	0.0049	0.0048
2.6*	0.0047	0.0045	0.0044	0.0043	0.0041	0.0040	0.0039	0.0038	0.0037	0.0036
2.7*	0.0035	0.0034	0.0033	0.0032	0.0031	0.0030	0.0029	0.0028	0.0027	0.0026
2.8*	0.0026	0.0025	0.0024	0.0023	0.0023	0.0022	0.0021	0.0021	0.0020	0.0019
2.9*	0.0019	0.0018	0.0018	0.0017	0.0016	0.0016	0.0015	0.0015	0.0014	0.0014

## 標準正規分布表 2

確率  $\varepsilon$  から上側  $\varepsilon$  点  $u(\varepsilon)$  を求める表      ex:  $P(x > 1.96) = 0.025$

	*=0	*=1	*=2	*=3	*=4	*=5	*=6	*=7	*=8	*=9
0.00*	$\infty$	3.0902	2.8782	2.7478	2.6521	2.5758	2.5121	2.4573	2.4089	2.3656
0.01*	2.3263	2.2904	2.2571	2.2262	2.1973	2.1701	2.1444	2.1201	2.0969	2.0749
0.02*	2.0537	2.0335	2.0141	1.9954	1.9774	1.9600	1.9431	1.9268	1.9110	1.8957
0.03*	1.8808	1.8663	1.8522	1.8384	1.8250	1.8119	1.7991	1.7866	1.7744	1.7624
0.04*	1.7507	1.7392	1.7279	1.7169	1.7060	1.6954	1.6849	1.6747	1.6646	1.6546
0.05*	1.6449	1.6352	1.6258	1.6164	1.6072	1.5982	1.5893	1.5805	1.5718	1.5632
0.06*	1.5548	1.5464	1.5382	1.5301	1.5220	1.5141	1.5063	1.4985	1.4909	1.4833
0.07*	1.4758	1.4684	1.4611	1.4538	1.4466	1.4395	1.4325	1.4255	1.4187	1.4118
0.08*	1.4051	1.3984	1.3917	1.3852	1.3787	1.3722	1.3658	1.3595	1.3532	1.3469
0.09*	1.3408	1.3346	1.3285	1.3225	1.3165	1.3106	1.3047	1.2988	1.2930	1.2873
0.10*	1.2816	1.2759	1.2702	1.2646	1.2591	1.2536	1.2481	1.2426	1.2372	1.2319
0.11*	1.2265	1.2212	1.2160	1.2107	1.2055	1.2004	1.1952	1.1901	1.1850	1.1800
0.12*	1.1750	1.1700	1.1650	1.1601	1.1552	1.1503	1.1455	1.1407	1.1359	1.1311
0.13*	1.1264	1.1217	1.1170	1.1123	1.1077	1.1031	1.0985	1.0939	1.0893	1.0848
0.14*	1.0803	1.0758	1.0714	1.0669	1.0625	1.0581	1.0537	1.0494	1.0450	1.0407
0.15*	1.0364	1.0322	1.0279	1.0237	1.0194	1.0152	1.0110	1.0069	1.0027	0.9986
0.16*	0.9945	0.9904	0.9863	0.9822	0.9782	0.9741	0.9701	0.9661	0.9621	0.9581
0.17*	0.9542	0.9502	0.9463	0.9424	0.9385	0.9346	0.9307	0.9269	0.9230	0.9192
0.18*	0.9154	0.9116	0.9078	0.9040	0.9002	0.8965	0.8927	0.8890	0.8853	0.8816
0.19*	0.8779	0.8742	0.8705	0.8669	0.8633	0.8596	0.8560	0.8524	0.8488	0.8452
0.20*	0.8416	0.8381	0.8345	0.8310	0.8274	0.8239	0.8204	0.8169	0.8134	0.8099
0.21*	0.8064	0.8030	0.7995	0.7961	0.7926	0.7892	0.7858	0.7824	0.7790	0.7756
0.22*	0.7722	0.7688	0.7655	0.7621	0.7588	0.7554	0.7521	0.7488	0.7454	0.7421
0.23*	0.7388	0.7356	0.7323	0.7290	0.7257	0.7225	0.7192	0.7160	0.7128	0.7095
0.24*	0.7063	0.7031	0.6999	0.6967	0.6935	0.6903	0.6871	0.6840	0.6808	0.6776
0.25*	0.6745	0.6713	0.6682	0.6651	0.6620	0.6588	0.6557	0.6526	0.6495	0.6464
0.26*	0.6433	0.6403	0.6372	0.6341	0.6311	0.6280	0.6250	0.6219	0.6189	0.6158
0.27*	0.6128	0.6098	0.6068	0.6038	0.6008	0.5978	0.5948	0.5918	0.5888	0.5858
0.28*	0.5828	0.5799	0.5769	0.5740	0.5710	0.5681	0.5651	0.5622	0.5592	0.5563
0.29*	0.5534	0.5505	0.5476	0.5446	0.5417	0.5388	0.5359	0.5330	0.5302	0.5273
0.30*	0.5244	0.5215	0.5187	0.5158	0.5129	0.5101	0.5072	0.5044	0.5015	0.4987
0.31*	0.4959	0.4930	0.4902	0.4874	0.4845	0.4817	0.4789	0.4761	0.4733	0.4705
0.32*	0.4677	0.4649	0.4621	0.4593	0.4565	0.4538	0.4510	0.4482	0.4454	0.4427
0.33*	0.4399	0.4372	0.4344	0.4316	0.4289	0.4261	0.4234	0.4207	0.4179	0.4152
0.34*	0.4125	0.4097	0.4070	0.4043	0.4016	0.3989	0.3961	0.3934	0.3907	0.3880
0.35*	0.3853	0.3826	0.3799	0.3772	0.3745	0.3719	0.3692	0.3665	0.3638	0.3611
0.36*	0.3585	0.3558	0.3531	0.3505	0.3478	0.3451	0.3425	0.3398	0.3372	0.3345
0.37*	0.3319	0.3292	0.3266	0.3239	0.3213	0.3186	0.3160	0.3134	0.3107	0.3081
0.38*	0.3055	0.3029	0.3002	0.2976	0.2950	0.2924	0.2898	0.2871	0.2845	0.2819
0.39*	0.2793	0.2767	0.2741	0.2715	0.2689	0.2663	0.2637	0.2611	0.2585	0.2559
0.40*	0.2533	0.2508	0.2482	0.2456	0.2430	0.2404	0.2378	0.2353	0.2327	0.2301
0.41*	0.2275	0.2250	0.2224	0.2198	0.2173	0.2147	0.2121	0.2096	0.2070	0.2045
0.42*	0.2019	0.1993	0.1968	0.1942	0.1917	0.1891	0.1866	0.1840	0.1815	0.1789
0.43*	0.1764	0.1738	0.1713	0.1687	0.1662	0.1637	0.1611	0.1586	0.1560	0.1535
0.44*	0.1510	0.1484	0.1459	0.1434	0.1408	0.1383	0.1358	0.1332	0.1307	0.1282
0.45*	0.1257	0.1231	0.1206	0.1181	0.1156	0.1130	0.1105	0.1080	0.1055	0.1030
0.46*	0.1004	0.0979	0.0954	0.0929	0.0904	0.0878	0.0853	0.0828	0.0803	0.0778
0.47*	0.0753	0.0728	0.0702	0.0677	0.0652	0.0627	0.0602	0.0577	0.0552	0.0527
0.48*	0.0502	0.0476	0.0451	0.0426	0.0401	0.0376	0.0351	0.0326	0.0301	0.0276
0.49*	0.0251	0.0226	0.0201	0.0175	0.0150	0.0125	0.0100	0.0075	0.0050	0.0025

# $\chi^2$ 分布表

自由度  $\phi$  の  $\chi^2$  分布の上側  $\varepsilon$  点:  $\chi_{\phi}^2(\varepsilon)$

$\phi \backslash \varepsilon$	0.995	0.990	0.975	0.950	0.900	0.100	0.050	0.025	0.010	0.005
1	0.0000	0.0002	0.0010	0.0039	0.0158	2.7055	3.8415	5.0239	6.6349	7.8794
2	0.0100	0.0201	0.0506	0.1026	0.2107	4.6052	5.9915	7.3778	9.2103	10.5966
3	0.0717	0.1148	0.2158	0.3518	0.5844	6.2514	7.8147	9.3484	11.3449	12.8382
4	0.2070	0.2971	0.4844	0.7107	1.0636	7.7794	9.4877	11.1433	13.2767	14.8603
5	0.4117	0.5543	0.8312	1.1455	1.6103	9.2364	11.0705	12.8325	15.0863	16.7496
6	0.6757	0.8721	1.2373	1.6354	2.2041	10.6446	12.5916	14.4494	16.8119	18.5476
7	0.9893	1.2390	1.6899	2.1673	2.8331	12.0170	14.0671	16.0128	18.4753	20.2777
8	1.3444	1.6465	2.1797	2.7326	3.4895	13.3616	15.5073	17.5345	20.0902	21.9550
9	1.7349	2.0879	2.7004	3.3251	4.1682	14.6837	16.9190	19.0228	21.6660	23.5894
10	2.1559	2.5582	3.2470	3.9403	4.8652	15.9872	18.3070	20.4832	23.2093	25.1882
11	2.6032	3.0535	3.8157	4.5748	5.5778	17.2750	19.6751	21.9200	24.7250	26.7568
12	3.0738	3.5706	4.4038	5.2260	6.3038	18.5493	21.0261	23.3367	26.2170	28.2995
13	3.5650	4.1069	5.0088	5.8919	7.0415	19.8119	22.3620	24.7356	27.6882	29.8195
14	4.0747	4.6604	5.6287	6.5706	7.7895	21.0641	23.6848	26.1189	29.1412	31.3193
15	4.6009	5.2293	6.2621	7.2609	8.5468	22.3071	24.9958	27.4884	30.5779	32.8013
16	5.1422	5.8122	6.9077	7.9616	9.3122	23.5418	26.2962	28.8454	31.9999	34.2672
17	5.6972	6.4078	7.5642	8.6718	10.0852	24.7690	27.5871	30.1910	33.4087	35.7185
18	6.2648	7.0149	8.2307	9.3905	10.8649	25.9894	28.8693	31.5264	34.8053	37.1565
19	6.8440	7.6327	8.9065	10.1170	11.6509	27.2036	30.1435	32.8523	36.1909	38.5823
20	7.4338	8.2604	9.5908	10.8508	12.4426	28.4120	31.4104	34.1696	37.5662	39.9968
21	8.0337	8.8972	10.2829	11.5913	13.2396	29.6151	32.6706	35.4789	38.9322	41.4011
22	8.6427	9.5425	10.9823	12.3380	14.0415	30.8133	33.9244	36.7807	40.2894	42.7957
23	9.2604	10.1957	11.6886	13.0905	14.8480	32.0069	35.1725	38.0756	41.6384	44.1813
24	9.8862	10.8564	12.4012	13.8484	15.6587	33.1962	36.4150	39.3641	42.9798	45.5585
25	10.5197	11.5240	13.1197	14.6114	16.4734	34.3816	37.6525	40.6465	44.3141	46.9279
26	11.1602	12.1981	13.8439	15.3792	17.2919	35.5632	38.8851	41.9232	45.6417	48.2899
27	11.8076	12.8785	14.5734	16.1514	18.1139	36.7412	40.1133	43.1945	46.9629	49.6449
28	12.4613	13.5647	15.3079	16.9279	18.9392	37.9159	41.3371	44.4608	48.2782	50.9934
29	13.1211	14.2565	16.0471	17.7084	19.7677	39.0875	42.5570	45.7223	49.5879	52.3356
30	13.7867	14.9535	16.7908	18.4927	20.5992	40.2560	43.7730	46.9792	50.8922	53.6720
31	14.4578	15.6555	17.5387	19.2806	21.4336	41.4217	44.9853	48.2319	52.1914	55.0027
32	15.1340	16.3622	18.2908	20.0719	22.2706	42.5847	46.1943	49.4804	53.4858	56.3281
33	15.8153	17.0735	19.0467	20.8665	23.1102	43.7452	47.3999	50.7251	54.7755	57.6484
34	16.5013	17.7891	19.8063	21.6643	23.9523	44.9032	48.6024	51.9660	56.0609	58.9639
35	17.1918	18.5089	20.5694	22.4650	24.7967	46.0588	49.8018	53.2033	57.3421	60.2748
36	17.8867	19.2327	21.3359	23.2686	25.6433	47.2122	50.9985	54.4373	58.6192	61.5812
37	18.5858	19.9602	22.1056	24.0749	26.4921	48.3634	52.1923	55.6680	59.8925	62.8833
38	19.2889	20.6914	22.8785	24.8839	27.3430	49.5126	53.3835	56.8955	61.1621	64.1814
39	19.9959	21.4262	23.6543	25.6954	28.1958	50.6598	54.5722	58.1201	62.4281	65.4756
40	20.7065	22.1643	24.4330	26.5093	29.0505	51.8051	55.7585	59.3417	63.6907	66.7660
50	27.9907	29.7067	32.3574	34.7643	37.6886	63.1671	67.5048	71.4202	76.1539	79.4900
60	35.5345	37.4849	40.4817	43.1880	46.4589	74.3970	79.0819	83.2977	88.3794	91.9517
70	43.2752	45.4417	48.7576	51.7393	55.3289	85.5270	90.5312	95.0232	100.4252	104.2149
80	51.1719	53.5401	57.1532	60.3915	64.2778	96.5782	101.8795	106.6286	112.3288	116.3211
90	59.1963	61.7541	65.6466	69.1260	73.2911	107.5650	113.1453	118.1359	124.1163	128.2989
100	67.3276	70.0649	74.2219	77.9295	82.3581	118.4980	124.3421	129.5612	135.8067	140.1695

# F 分布表 1

F 分布の上側  $\varepsilon$  点:  $F_n^m(\varepsilon)$

n	1	2	3	4	5	6	7	8	9	10
1	39.8635	49.5000	53.5932	55.8330	57.2401	58.2044	58.9000	59.4390	59.8576	60.1950
2	8.5263	9.0000	9.1618	9.2434	9.2926	9.3255	9.3491	9.3668	9.3805	9.3916
3	5.5383	5.4624	5.3908	5.3426	5.3092	5.2847	5.2662	5.2517	5.2400	5.2304
4	4.5448	4.3246	4.1909	4.1072	4.0506	4.0097	3.9790	3.9549	3.9357	3.9199
5	4.0604	3.7797	3.6195	3.5202	3.4530	3.4045	3.3679	3.3393	3.3163	3.2974
6	3.7759	3.4633	3.2888	3.1808	3.1075	3.0546	3.0145	2.9830	2.9577	2.9369
7	3.5894	3.2574	3.0741	2.9605	2.8833	2.8274	2.7849	2.7516	2.7247	2.7025
8	3.4579	3.1131	2.9238	2.8064	2.7264	2.6683	2.6241	2.5893	2.5612	2.5380
9	3.3603	3.0065	2.8129	2.6927	2.6106	2.5509	2.5053	2.4694	2.4403	2.4163
10	3.2850	2.9245	2.7277	2.6053	2.5216	2.4606	2.4140	2.3772	2.3473	2.3226

m	$\varepsilon = 0.050$									
n	1	2	3	4	5	6	7	8	9	10
1	161.4476	199.5000	215.7073	224.5832	230.1619	233.9860	236.7684	238.8827	240.5433	241.8817
2	18.5128	19.0000	19.1643	19.2468	19.2964	19.3295	19.3532	19.3710	19.3848	19.3959
3	10.1280	9.5521	9.2766	9.1172	9.0135	8.9406	8.8867	8.8452	8.8123	8.7855
4	7.7086	6.9443	6.5914	6.3882	6.2561	6.1631	6.0942	6.0410	5.9988	5.9644
5	6.6079	5.7861	5.4095	5.1922	5.0503	4.9503	4.8759	4.8183	4.7725	4.7351
6	5.9874	5.1433	4.7571	4.5337	4.3874	4.2839	4.2067	4.1468	4.0990	4.0600
7	5.5914	4.7374	4.3468	4.1203	3.9715	3.8660	3.7870	3.7257	3.6767	3.6365
8	5.3177	4.4590	4.0662	3.8379	3.6875	3.5806	3.5005	3.4381	3.3881	3.3472
9	5.1174	4.2565	3.8625	3.6331	3.4817	3.3738	3.2927	3.2296	3.1789	3.1373
10	4.9646	4.1028	3.7083	3.4780	3.3258	3.2172	3.1355	3.0717	3.0204	2.9782

m	$\varepsilon = 0.050$									
n	5	6	7	8	9	10	20	30	40	50
5	5.050	4.950	4.876	4.818	4.772	4.735	4.558	4.496	4.464	4.444
6	4.387	4.284	4.207	4.147	4.099	4.060	3.874	3.808	3.774	3.754
7	3.972	3.866	3.787	3.726	3.677	3.637	3.445	3.376	3.340	3.319
8	3.687	3.581	3.500	3.438	3.388	3.347	3.150	3.079	3.043	3.020
9	3.482	3.374	3.293	3.230	3.179	3.137	2.936	2.864	2.826	2.803
10	3.326	3.217	3.135	3.072	3.020	2.978	2.774	2.700	2.661	2.637
12	3.106	2.996	2.913	2.849	2.796	2.753	2.544	2.466	2.426	2.401
14	2.958	2.848	2.764	2.699	2.646	2.602	2.388	2.308	2.266	2.241
16	2.852	2.741	2.657	2.591	2.538	2.494	2.276	2.194	2.151	2.124
18	2.773	2.661	2.577	2.510	2.456	2.412	2.191	2.107	2.063	2.035
20	2.711	2.599	2.514	2.447	2.393	2.348	2.124	2.039	1.994	1.966
30	2.534	2.421	2.334	2.266	2.211	2.165	1.932	1.841	1.792	1.761
40	2.449	2.336	2.249	2.180	2.124	2.077	1.839	1.744	1.693	1.660

m	$\varepsilon = 0.025$									
n	1	2	3	4	5	6	7	8	9	10
1	647.7890	799.5000	864.1630	899.5833	921.8479	937.1111	948.2189	956.6562	963.2846	968.6274
2	38.5063	39.0000	39.1655	39.2484	39.2982	39.3315	39.3552	39.3730	39.3869	39.3980
3	17.4434	16.0441	15.4392	15.1010	14.8848	14.7347	14.6244	14.5399	14.4731	14.4189
4	12.2179	10.6491	9.9792	9.6045	9.3645	9.1973	9.0741	8.9796	8.9047	8.8439
5	10.0070	8.4336	7.7636	7.3879	7.1484	6.9777	6.8531	6.7572	6.6811	6.6192
6	8.8131	7.2599	6.5988	6.2272	5.9876	5.8198	5.6955	5.5996	5.5234	5.4613
7	8.0727	6.5415	5.8898	5.5226	5.2832	5.1186	4.9949	4.8993	4.8232	4.7611
8	7.5709	6.0595	5.4160	5.0526	4.8173	4.6517	4.5286	4.4333	4.3572	4.2951
9	7.2093	5.7147	5.0781	4.7181	4.4844	4.3197	4.1970	4.1020	4.0260	3.9639
10	6.9367	5.4564	4.8256	4.4683	4.2361	4.0721	3.9498	3.8549	3.7790	3.7168

m	$\varepsilon = 0.010$									
n	1	2	3	4	5	6	7	8	9	10
1	4052.1807	4999.5000	5403.3520	5624.5833	5763.6496	5858.9861	5928.3557	5981.0703	6022.4732	6055.8467
2	98.5025	99.0000	99.1662	99.2494	99.2993	99.3326	99.3564	99.3742	99.3881	99.3992
3	34.1162	30.8165	29.4567	28.7099	28.2371	27.9107	27.6717	27.4892	27.3452	27.2287
4	21.1977	18.0000	16.6944	15.9770	15.5219	15.2069	14.9578	14.7989	14.6591	14.5459
5	16.2582	13.2739	12.0600	11.3919	10.9670	10.6723	10.4555	10.2893	10.1578	10.0510
6	13.7450	10.9248	9.7795	9.1483	8.7459	8.4661	8.2600	8.1017	7.9761	7.8741
7	12.2464	9.5466	8.4513	7.8466	7.4604	7.1914	6.9928	6.8400	6.7188	6.6201
8	11.2586	8.6491	7.5910	7.0061	6.6318	6.3707	6.1776	6.0289	5.9106	5.8143
9	10.5614	8.0215	6.9919	6.4221	6.0569	5.8018	5.6129	5.4671	5.3511	5.2565
10	10.0443	7.5594	6.5523	5.9943	5.6363	5.3858	5.2001	5.0567	4.9424	4.8491

m	$\varepsilon = 0.005$									
n	1	2	3	4	5	6	7	8	9	10
1	16210.7227	19999.5000	21614.7414	22499.5833	23055.7982	23437.1111	23714.5658	23925.4062	24091.0041	24224.4688
2	198.5013	199.0000	199.1664	199.2497	199.2996	199.3330	199.3568	199.3746	199.3885	199.3996
3	55.5520	49.7993	47.4672	46.1946	45.3916	44.8385	44.4341	44.1256	43.8824	43.6858
4	31.3328	26.2843	24.2591	23.1545	22.4564	21.9746	21.6217	21.3520	21.1391	20.9667
5	22.7848	18.3138	16.5298	15.5561	14.9396	14.5133	14.2004	13.9610	13.7716	13.6182
6	18.6350	14.5441	12.9166	12.0275	11.4637	11.0730	10.7859	10.5658	10.3915	10.2500
7	16.2356	12.4040	10.8824	10.0505	9.5221	9.1553	8.8854	8.6781	8.5138	8.3803
8	14.6882	11.0424	9.5965	8.8051	8.3018	7.9520	7.6941	7.4959	7.3386	7.2106
9	13.6136	10.1067	8.7171	7.9559	7.4712	7.1339	6.8849	6.6933	6.5411	6.4172
10	12.8265	9.4270	8.0807	7.3428	6.8724	6.5446	6.3025	6.1159	5.9676	5.8467

## F 分布表 2

F 分布の上側  $\varepsilon$  点:  $F_n(\varepsilon)$

	5	6	7	8	9	10	11	12	13	14	15	
n	5	3.4530	3.4045	3.3679	3.3393	3.3163	3.2974	3.2816	3.2682	3.2567	3.2468	3.2380
	6	3.1075	3.0546	3.0145	2.9830	2.9577	2.9369	2.9195	2.9047	2.8920	2.8809	2.8712
	7	2.8833	2.8274	2.7849	2.7516	2.7247	2.7025	2.6839	2.6681	2.6545	2.6426	2.6322
	8	2.7264	2.6683	2.6241	2.5893	2.5612	2.5380	2.5186	2.5020	2.4876	2.4752	2.4642
	9	2.6106	2.5509	2.5053	2.4694	2.4403	2.4163	2.3961	2.3789	2.3640	2.3510	2.3396
	10	2.5216	2.4606	2.4140	2.3772	2.3473	2.3226	2.3018	2.2841	2.2687	2.2553	2.2435
	11	2.4512	2.3891	2.3416	2.3040	2.2735	2.2482	2.2269	2.2087	2.1930	2.1792	2.1671
	12	2.3940	2.3310	2.2828	2.2446	2.2135	2.1878	2.1660	2.1474	2.1313	2.1173	2.1049
	13	2.3467	2.2830	2.2341	2.1953	2.1638	2.1376	2.1155	2.0966	2.0802	2.0658	2.0532
	14	2.3069	2.2426	2.1931	2.1539	2.1220	2.0954	2.0729	2.0537	2.0370	2.0224	2.0095
	15	2.2730	2.2081	2.1582	2.1185	2.0862	2.0593	2.0366	2.0171	2.0001	1.9853	1.9722

	m	5	6	7	8	9	10	11	12	13	14	15
n	5	5.0503	4.9503	4.8759	4.8183	4.7725	4.7351	4.7040	4.6777	4.6552	4.6358	4.6188
	6	4.3874	4.2839	4.2067	4.1468	4.0990	4.0600	4.0274	3.9999	3.9764	3.9559	3.9381
	7	3.9715	3.8660	3.7870	3.7257	3.6767	3.6365	3.6030	3.5747	3.5503	3.5292	3.5107
	8	3.6875	3.5806	3.5005	3.4381	3.3891	3.3472	3.3130	3.2839	3.2590	3.2374	3.2184
	9	3.4817	3.3738	3.2927	3.2296	3.1799	3.1373	3.1025	3.0729	3.0475	3.0255	3.0061
	10	3.3258	3.2172	3.1355	3.0717	3.0204	2.9782	2.9430	2.9130	2.8872	2.8647	2.8450
	11	3.2039	3.0946	3.0123	2.9480	2.8962	2.8536	2.8179	2.7876	2.7614	2.7386	2.7186
	12	3.1059	2.9961	2.9134	2.8496	2.7964	2.7534	2.7173	2.6866	2.6602	2.6371	2.6169
	13	3.0254	2.9153	2.8321	2.7681	2.7144	2.6710	2.6347	2.6037	2.5769	2.5536	2.5331
	14	2.9582	2.8477	2.7642	2.6997	2.6458	2.6022	2.5655	2.5342	2.5073	2.4837	2.4630
	15	2.9013	2.7905	2.7066	2.6408	2.5876	2.5437	2.5068	2.4753	2.4481	2.4244	2.4034

	m	5	6	7	8	9	10	11	12	13	14	15
n	5	7.1464	6.9777	6.8531	6.7572	6.6811	6.6192	6.5678	6.5245	6.4876	6.4556	6.4277
	6	5.9876	5.8198	5.6955	5.5996	5.5234	5.4613	5.4098	5.3662	5.3290	5.2968	5.2687
	7	5.2852	5.1186	4.9949	4.8993	4.8232	4.7611	4.7095	4.6658	4.6285	4.5961	4.5678
	8	4.8173	4.6517	4.5286	4.4333	4.3572	4.2951	4.2434	4.1987	4.1622	4.1297	4.1012
	9	4.4844	4.3197	4.1970	4.1020	4.0260	3.9639	3.9121	3.8682	3.8306	3.7980	3.7694
	10	4.2361	4.0721	3.9498	3.8549	3.7790	3.7168	3.6649	3.6209	3.5832	3.5504	3.5217
	11	4.0440	3.8807	3.7586	3.6638	3.5879	3.5257	3.4737	3.4296	3.3917	3.3588	3.3299
	12	3.8911	3.7283	3.6065	3.5118	3.4358	3.3736	3.3215	3.2773	3.2393	3.2062	3.1772
	13	3.7667	3.6043	3.4827	3.3880	3.3120	3.2497	3.1975	3.1532	3.1150	3.0819	3.0527
	14	3.6634	3.5014	3.3799	3.2853	3.2093	3.1469	3.0946	3.0502	3.0119	2.9786	2.9493
	15	3.5764	3.4147	3.2934	3.1987	3.1227	3.0602	3.0078	2.9633	2.9249	2.8915	2.8621

	m	5	6	7	8	9	10	11	12	13	14	15
n	5	10.9670	10.6723	10.4555	10.2893	10.1578	10.0510	9.9626	9.8883	9.8248	9.7700	9.7222
	6	8.7459	8.4661	8.2600	8.1017	7.9761	7.8741	7.7896	7.7183	7.6575	7.6049	7.5590
	7	7.4604	7.1914	6.9928	6.8400	6.7188	6.6201	6.5382	6.4691	6.4100	6.3590	6.3143
	8	6.6318	6.3707	6.1776	6.0289	5.9106	5.8143	5.7343	5.6667	5.6089	5.5589	5.5151
	9	6.0569	5.8018	5.6129	5.4671	5.3511	5.2565	5.1779	5.1114	5.0545	5.0052	4.9621
	10	5.6363	5.3858	5.2001	5.0567	4.9424	4.8491	4.7715	4.7059	4.6496	4.6008	4.5581
	11	5.3160	5.0692	4.8861	4.7445	4.6315	4.5393	4.4624	4.3974	4.3416	4.2932	4.2509
	12	5.0643	4.8206	4.6395	4.4994	4.3875	4.2961	4.2198	4.1553	4.0999	4.0518	4.0096
	13	4.8616	4.6204	4.4410	4.3021	4.1911	4.1003	4.0245	3.9603	3.9052	3.8573	3.8154
	14	4.6950	4.4558	4.2779	4.1399	4.0297	3.9394	3.8640	3.8001	3.7452	3.6975	3.6557
	15	4.5556	4.3183	4.1415	4.0045	3.8948	3.8049	3.7299	3.6662	3.6115	3.5639	3.5222

	m	5	6	7	8	9	10	11	12	13	14	15
n	5	14.9396	14.5133	14.2004	13.9610	13.7716	13.6182	13.4912	13.3845	13.2934	13.2148	13.1463
	6	11.4637	11.0730	10.7859	10.5658	10.3915	10.2500	10.1329	10.0343	9.9501	9.8774	9.8140
	7	9.5221	9.1553	8.8854	8.6781	8.5138	8.3803	8.2697	8.1764	8.0967	8.0279	7.9678
	8	8.3018	7.9520	7.6941	7.4959	7.3386	7.2106	7.1045	7.0149	6.9384	6.8721	6.8143
	9	7.4712	7.1339	6.8849	6.6933	6.5411	6.4172	6.3142	6.2274	6.1530	6.0887	6.0325
	10	6.8724	6.5446	6.3025	6.1159	5.9676	5.8467	5.7462	5.6613	5.5887	5.5257	5.4707
	11	6.4217	6.1016	5.8648	5.6821	5.5368	5.4183	5.3197	5.2363	5.1649	5.1031	5.0489
	12	6.0711	5.7570	5.5245	5.3451	5.2021	5.0855	4.9884	4.9062	4.8358	4.7748	4.7213
	13	5.7910	5.4819	5.2529	5.0761	4.9351	4.8199	4.7240	4.6429	4.5733	4.5129	4.4600
	14	5.5623	5.2574	5.0313	4.8566	4.7173	4.6034	4.5085	4.4281	4.3591	4.2993	4.2468
	15	5.3721	5.0708	4.8473	4.6744	4.5364	4.4235	4.3295	4.2497	4.1813	4.1219	4.0698

$t$  分布表

$\Phi \backslash \varepsilon$	0.100	0.050	0.025	0.010	0.005
1	3.0777	6.3138	12.7062	31.8205	63.6567
2	1.8856	2.9200	4.3027	6.9646	9.9248
3	1.6377	2.3534	3.1824	4.5407	5.8409
4	1.5332	2.1318	2.7764	3.7469	4.6041
5	1.4759	2.0150	2.5706	3.3649	4.0321
6	1.4398	1.9432	2.4469	3.1427	3.7074
7	1.4149	1.8946	2.3646	2.9980	3.4995
8	1.3968	1.8595	2.3060	2.8965	3.3554
9	1.3830	1.8331	2.2622	2.8214	3.2498
10	1.3722	1.8125	2.2281	2.7638	3.1693
11	1.3634	1.7959	2.2010	2.7181	3.1058
12	1.3562	1.7823	2.1788	2.6810	3.0545
13	1.3502	1.7709	2.1604	2.6503	3.0123
14	1.3450	1.7613	2.1448	2.6245	2.9768
15	1.3406	1.7531	2.1314	2.6025	2.9467
16	1.3368	1.7459	2.1199	2.5835	2.9208
17	1.3334	1.7396	2.1098	2.5669	2.8982
18	1.3304	1.7341	2.1009	2.5524	2.8784
19	1.3277	1.7291	2.0930	2.5395	2.8609
20	1.3253	1.7247	2.0860	2.5280	2.8453
21	1.3232	1.7207	2.0796	2.5176	2.8314
22	1.3212	1.7171	2.0739	2.5083	2.8188
23	1.3195	1.7139	2.0687	2.4999	2.8073
24	1.3178	1.7109	2.0639	2.4922	2.7969
25	1.3163	1.7081	2.0595	2.4851	2.7874
26	1.3150	1.7056	2.0555	2.4786	2.7787
27	1.3137	1.7033	2.0518	2.4727	2.7707
28	1.3125	1.7011	2.0484	2.4671	2.7633
29	1.3114	1.6991	2.0452	2.4620	2.7564
30	1.3104	1.6973	2.0423	2.4573	2.7500
31	1.3095	1.6955	2.0395	2.4528	2.7440
32	1.3086	1.6939	2.0369	2.4487	2.7385
33	1.3077	1.6924	2.0345	2.4448	2.7333
34	1.3070	1.6909	2.0322	2.4411	2.7284
35	1.3062	1.6896	2.0301	2.4377	2.7238
36	1.3055	1.6883	2.0281	2.4345	2.7195
37	1.3049	1.6871	2.0262	2.4314	2.7154
38	1.3042	1.6860	2.0244	2.4286	2.7116
39	1.3036	1.6849	2.0227	2.4258	2.7079
40	1.3031	1.6839	2.0211	2.4233	2.7045
50	1.2987	1.6759	2.0086	2.4033	2.6778
60	1.2958	1.6706	2.0003	2.3901	2.6603
70	1.2938	1.6669	1.9944	2.3808	2.6479
80	1.2922	1.6641	1.9901	2.3739	2.6387
90	1.2910	1.6620	1.9867	2.3685	2.6316
100	1.2901	1.6602	1.9840	2.3642	2.6259

自然対数表

x	$\log_e x$
0.1	-2.3026
0.2	-1.6094
0.3	-1.2040
0.4	-0.9163
0.5	-0.6931
0.6	-0.5108
0.7	-0.3567
0.8	-0.2231
0.9	-0.1054
1.0	0.0000
1.1	0.0953
1.2	0.1823
1.3	0.2624
1.4	0.3365
1.5	0.4055
1.6	0.4700
1.7	0.5306
1.8	0.5878
1.9	0.6419
2.0	0.6931
2.1	0.7419
2.2	0.7885
2.3	0.8329
2.4	0.8755
2.5	0.9163
2.6	0.9555
2.7	0.9933
2.8	1.0296
2.9	1.0647
3.0	1.0986
3.5	1.2528
4.0	1.3863
4.5	1.5041
5.0	1.6094
5.5	1.7047
6.0	1.7918
6.5	1.8718
7.0	1.9459
7.5	2.0149
8.0	2.0794
8.5	2.1401
9.0	2.1972
9.5	2.2513
10.0	2.3026

常用対数表

x	$\log_{10} x$
0.1	-1.0000
0.2	-0.6990
0.3	-0.5229
0.4	-0.3979
0.5	-0.3010
0.6	-0.2218
0.7	-0.1549
0.8	-0.0969
0.9	-0.0458
1.0	0.0000
1.1	0.0414
1.2	0.0792
1.3	0.1139
1.4	0.1461
1.5	0.1761
1.6	0.2041
1.7	0.2304
1.8	0.2553
1.9	0.2788
2.0	0.3010
2.1	0.3222
2.2	0.3424
2.3	0.3617
2.4	0.3802
2.5	0.3979
2.6	0.4150
2.7	0.4314
2.8	0.4472
2.9	0.4624
3.0	0.4771
3.5	0.5441
4.0	0.6021
4.5	0.6532
5.0	0.6990
5.5	0.7404
6.0	0.7782
6.5	0.8129
7.0	0.8451
7.5	0.8751
8.0	0.9031
8.5	0.9294
9.0	0.9542
9.5	0.9777
10.0	1.0000

指数関数表

x	$\exp(x)$
-0.10	0.9048
-0.09	0.9139
-0.08	0.9231
-0.07	0.9324
-0.06	0.9418
-0.05	0.9512
-0.04	0.9608
-0.03	0.9704
-0.02	0.9802
-0.01	0.9900
0.00	1.0000
0.01	1.0101
0.02	1.0202
0.03	1.0305
0.04	1.0408
0.05	1.0513
0.06	1.0618
0.07	1.0725
0.08	1.0833
0.09	1.0942
0.10	1.1052
0.11	1.1163
0.12	1.1275
0.13	1.1388
0.14	1.1503
0.15	1.1618
0.16	1.1735
0.17	1.1853
0.18	1.1972
0.19	1.2092
0.20	1.2214
0.21	1.2337
0.22	1.2461
0.23	1.2586
0.24	1.2712
0.25	1.2840
0.26	1.2969
0.27	1.3100
0.28	1.3231
0.29	1.3364
0.30	1.3499
0.31	1.3634
0.32	1.3771
0.33	1.3910



# ポアソン分布表

ポアソン分布の確率を平均値  $\lambda$  と分布の取りうる値  $k$  からとめる表  $P(X = k) = e^{-\lambda} \cdot \frac{\lambda^k}{k!}$

	0	1	2	3	4	5	6	7	8	9	10
λ	0.5	0.60653	0.30327	0.07582	0.01264	0.00158	0.00016	0.00001	0.00000	0.00000	0.00000
	0.6	0.54881	0.32929	0.09879	0.01976	0.00296	0.00036	0.00004	0.00000	0.00000	0.00000
	0.7	0.49659	0.34761	0.12166	0.02839	0.00497	0.00070	0.00008	0.00001	0.00000	0.00000
	0.8	0.44933	0.35946	0.14379	0.03834	0.00767	0.00123	0.00016	0.00002	0.00000	0.00000
	0.9	0.40657	0.36591	0.16466	0.04940	0.01111	0.00200	0.00030	0.00004	0.00000	0.00000
	1.0	0.36788	0.36788	0.18394	0.06131	0.01533	0.00307	0.00051	0.00007	0.00001	0.00000
	1.1	0.33287	0.36616	0.20139	0.07384	0.02031	0.00447	0.00082	0.00013	0.00002	0.00000
	1.2	0.30119	0.36143	0.21686	0.08674	0.02602	0.00625	0.00125	0.00021	0.00003	0.00000
	1.3	0.27253	0.35429	0.23029	0.09979	0.03243	0.00843	0.00183	0.00034	0.00006	0.00001
	1.4	0.24660	0.34524	0.24167	0.11278	0.03947	0.01105	0.00258	0.00052	0.00009	0.00001
	1.5	0.22313	0.33470	0.25102	0.12551	0.04707	0.01412	0.00353	0.00076	0.00014	0.00002
	1.6	0.20190	0.32303	0.25843	0.13783	0.05513	0.01764	0.00470	0.00108	0.00022	0.00004
	1.7	0.18268	0.31056	0.26398	0.14959	0.06357	0.02162	0.00612	0.00149	0.00032	0.00006
	1.8	0.16530	0.29754	0.26778	0.16067	0.07230	0.02603	0.00781	0.00201	0.00045	0.00009
	1.9	0.14957	0.28418	0.26997	0.17098	0.08122	0.03086	0.00977	0.00265	0.00063	0.00013
	2.0	0.13534	0.27067	0.27067	0.18045	0.09022	0.03609	0.01203	0.00344	0.00086	0.00019
	2.1	0.12246	0.25716	0.27002	0.18901	0.09923	0.04168	0.01459	0.00438	0.00115	0.00027
	2.2	0.11080	0.24377	0.26814	0.19664	0.10815	0.04759	0.01745	0.00548	0.00151	0.00037
	2.3	0.10026	0.23060	0.26518	0.20331	0.11690	0.05378	0.02061	0.00677	0.00195	0.00050
	2.4	0.09072	0.21772	0.26127	0.20901	0.12541	0.06020	0.02408	0.00826	0.00248	0.00066
	2.5	0.08208	0.20521	0.25652	0.21376	0.13360	0.06680	0.02783	0.00994	0.00311	0.00086
	2.6	0.07427	0.19311	0.25104	0.21757	0.14142	0.07354	0.03187	0.01184	0.00385	0.00111
	2.7	0.06721	0.18145	0.24496	0.22047	0.14882	0.08036	0.03616	0.01395	0.00471	0.00141
	2.8	0.06081	0.17027	0.23838	0.22248	0.15574	0.08721	0.04070	0.01628	0.00570	0.00177
	2.9	0.05502	0.15957	0.23137	0.22366	0.16215	0.09405	0.04546	0.01883	0.00683	0.00220
	3.0	0.04979	0.14936	0.22404	0.22404	0.16803	0.10082	0.05041	0.02160	0.00810	0.00270
	3.1	0.04505	0.13965	0.21646	0.22368	0.17335	0.10748	0.05553	0.02459	0.00953	0.00328
	3.2	0.04076	0.13044	0.20870	0.22262	0.17809	0.11398	0.06079	0.02779	0.01112	0.00395
	3.3	0.03688	0.12171	0.20083	0.22091	0.18225	0.12029	0.06616	0.03119	0.01287	0.00472
	3.4	0.03337	0.11347	0.19290	0.21862	0.18582	0.12636	0.07160	0.03478	0.01478	0.00558
	3.5	0.03020	0.10569	0.18496	0.21579	0.18881	0.13217	0.07710	0.03855	0.01687	0.00656
	3.6	0.02732	0.09837	0.17706	0.21247	0.19122	0.13768	0.08261	0.04248	0.01912	0.00765
	3.7	0.02472	0.09148	0.16923	0.20872	0.19307	0.14287	0.08810	0.04657	0.02154	0.00885
	3.8	0.02237	0.08501	0.16152	0.20459	0.19436	0.14771	0.09355	0.05079	0.02412	0.01019
	3.9	0.02024	0.07894	0.15394	0.20012	0.19512	0.15219	0.09893	0.05512	0.02687	0.01164
	4.0	0.01832	0.07326	0.14653	0.19537	0.19537	0.15629	0.10420	0.05954	0.02977	0.01323

## $z$ 変換表

$r$  を  $z = \frac{1}{2} \log \frac{1+r}{1-r}$  より読む表

$z$	*=0	*=1	*=2	*=3	*=4	*=5	*=6	*=7	*=8	*=9
0.0*	0.0000	0.0100	0.0200	0.0300	0.0400	0.0500	0.0599	0.0699	0.0798	0.0898
0.1*	0.0997	0.1096	0.1194	0.1293	0.1391	0.1489	0.1586	0.1684	0.1781	0.1877
0.2*	0.1974	0.2070	0.2165	0.2260	0.2355	0.2449	0.2543	0.2636	0.2729	0.2821
0.3*	0.2913	0.3004	0.3095	0.3185	0.3275	0.3364	0.3452	0.3540	0.3627	0.3714
0.4*	0.3799	0.3885	0.3969	0.4053	0.4136	0.4219	0.4301	0.4382	0.4462	0.4542
0.5*	0.4621	0.4699	0.4777	0.4854	0.4930	0.5005	0.5080	0.5154	0.5227	0.5299
0.6*	0.5370	0.5441	0.5511	0.5581	0.5649	0.5717	0.5784	0.5850	0.5915	0.5980
0.7*	0.6044	0.6107	0.6169	0.6231	0.6291	0.6351	0.6411	0.6469	0.6527	0.6584
0.8*	0.6640	0.6696	0.6751	0.6805	0.6858	0.6911	0.6963	0.7014	0.7064	0.7114
0.9*	0.7163	0.7211	0.7259	0.7306	0.7352	0.7398	0.7443	0.7487	0.7531	0.7574
1.0*	0.7616	0.7658	0.7699	0.7739	0.7779	0.7818	0.7857	0.7895	0.7932	0.7969
1.1*	0.8005	0.8041	0.8076	0.8110	0.8144	0.8178	0.8210	0.8243	0.8275	0.8306
1.2*	0.8337	0.8367	0.8397	0.8426	0.8455	0.8483	0.8511	0.8538	0.8565	0.8591
1.3*	0.8617	0.8643	0.8668	0.8692	0.8717	0.8741	0.8764	0.8787	0.8810	0.8832
1.4*	0.8854	0.8875	0.8896	0.8917	0.8937	0.8957	0.8977	0.8996	0.9015	0.9033
1.5*	0.9051	0.9069	0.9087	0.9104	0.9121	0.9138	0.9154	0.9170	0.9186	0.9201
1.6*	0.9217	0.9232	0.9246	0.9261	0.9275	0.9289	0.9302	0.9316	0.9329	0.9341
1.7*	0.9354	0.9366	0.9379	0.9391	0.9402	0.9414	0.9425	0.9436	0.9447	0.9458
1.8*	0.9468	0.9478	0.9488	0.9498	0.9508	0.9517	0.9527	0.9536	0.9545	0.9554
1.9*	0.9562	0.9571	0.9579	0.9587	0.9595	0.9603	0.9611	0.9618	0.9626	0.9633
2.0*	0.9640	0.9647	0.9654	0.9661	0.9667	0.9674	0.9680	0.9687	0.9693	0.9699
2.1*	0.9705	0.9710	0.9716	0.9721	0.9727	0.9732	0.9737	0.9743	0.9748	0.9753
2.2*	0.9757	0.9762	0.9767	0.9771	0.9776	0.9780	0.9785	0.9789	0.9793	0.9797
2.3*	0.9801	0.9805	0.9809	0.9812	0.9816	0.9820	0.9823	0.9827	0.9830	0.9833
2.4*	0.9837	0.9840	0.9843	0.9846	0.9849	0.9852	0.9855	0.9858	0.9861	0.9863
2.5*	0.9866	0.9869	0.9871	0.9874	0.9876	0.9879	0.9881	0.9884	0.9886	0.9888
2.6*	0.9890	0.9892	0.9895	0.9897	0.9899	0.9901	0.9903	0.9905	0.9906	0.9908
2.7*	0.9910	0.9912	0.9914	0.9915	0.9917	0.9919	0.9920	0.9922	0.9923	0.9925
2.8*	0.9926	0.9928	0.9929	0.9931	0.9932	0.9933	0.9935	0.9936	0.9937	0.9938
2.9*	0.9940	0.9941	0.9942	0.9943	0.9944	0.9945	0.9946	0.9947	0.9949	0.9950