

Tabella D.5 Funzione di ripartizione della *t* di Student\*

$$F(t) = \int_{-\infty}^t \frac{\Gamma\left(\frac{n+1}{2}\right)}{\Gamma\left(\frac{n}{2}\right)\sqrt{\pi} \left(1 + \frac{x^2}{n}\right)^{\frac{n+1}{2}}} dx$$

$F$ $n$	.75	.90	.95	.975	.99	.995	.9995
1	1.000	3.078	6.314	12.706	31.821	63.657	636.619
2	.816	1.886	2.920	4.303	6.965	9.925	31.598
3	.765	1.638	2.353	3.182	4.541	5.841	12.941
4	.741	1.533	2.132	2.776	3.747	4.604	8.610
5	.727	1.476	2.015	2.571	3.365	4.032	6.859
6	.718	1.440	1.943	2.447	3.143	3.707	5.959
7	.711	1.415	1.895	2.365	2.998	3.499	5.405
8	.706	1.397	1.860	2.306	2.896	3.355	5.041
9	.703	1.383	1.833	2.262	2.821	3.250	4.781
10	.700	1.372	1.812	2.228	2.764	3.169	4.587
11	.697	1.363	1.796	2.201	2.718	3.106	4.437
12	.695	1.356	1.782	2.179	2.681	3.055	4.318
13	.694	1.350	1.771	2.160	2.650	3.012	4.221
14	.692	1.345	1.761	2.145	2.624	2.977	4.140
15	.691	1.341	1.753	2.131	2.602	2.947	4.073
16	.690	1.337	1.746	2.120	2.583	2.921	4.015
17	.689	1.333	1.740	2.110	2.567	2.898	3.965
18	.688	1.330	1.734	2.101	2.552	2.878	3.922
19	.688	1.328	1.729	2.093	2.539	2.861	3.883
20	.687	1.325	1.725	2.086	2.528	2.845	3.850
21	.686	1.323	1.721	2.080	2.518	2.831	3.819
22	.686	1.321	1.717	2.074	2.508	2.819	3.792
23	.685	1.319	1.714	2.069	2.500	2.807	3.767
24	.685	1.318	1.711	2.064	2.492	2.797	3.745
25	.684	1.316	1.708	2.060	2.485	2.787	3.725
26	.684	1.315	1.706	2.056	2.479	2.779	3.707
27	.684	1.314	1.703	2.052	2.473	2.771	3.690
28	.683	1.313	1.701	2.048	2.467	2.763	3.674
29	.683	1.311	1.699	2.045	2.462	2.756	3.659
30	.683	1.310	1.697	2.042	2.457	2.750	3.646
40	.681	1.303	1.684	2.021	2.423	2.704	3.551
60	.679	1.296	1.671	2.000	2.390	2.660	3.460
120	.677	1.289	1.658	1.980	2.358	2.617	3.373
$\infty$	.674	1.282	1.645	1.960	2.326	2.576	3.291

\*R. A. Fisher, Frank Yates, "Statistical Tables", Oliver & Boyd, Ltd, 1938.



Tabella Z.3 Funzione di ripartizione chi-quadrato\*

$$F(u) = \int_0^u \frac{x^{n-2} e^{-x/2} dx}{2^{n/2} \Gamma(n/2)}$$

n	.005	.010	.025	.050	.100	.250	.500	.750	.900	.950	.975	.990	.995
1	.04393	.07157	.10982	.15393	.2158	.302	.455	1.32	2.71	3.84	5.02	6.63	7.88
2	.0100	.0201	.0306	.0407	.0511	.0617	.0724	1.39	2.77	3.84	5.02	6.63	7.88
3	.0717	.115	.16	.216	.283	.352	.421	1.21	2.37	3.36	4.35	5.39	6.38
4	.207	.297	.384	.467	.546	.621	.693	1.41	2.44	3.36	4.24	5.11	5.97
5	.412	.554	.691	.823	.950	1.07	1.19	1.59	2.59	3.36	4.11	4.84	5.55
6	.676	.872	1.04	1.19	1.33	1.46	1.58	1.96	2.96	3.59	4.24	4.84	5.41
7	.989	1.24	1.49	1.64	1.78	1.91	2.03	2.41	3.41	4.04	4.64	5.21	5.78
8	1.34	1.65	1.91	2.17	2.33	2.47	2.60	2.98	3.98	4.61	5.21	5.78	6.35
9	1.73	2.09	2.35	2.61	2.77	2.91	3.04	3.42	4.42	5.05	5.65	6.22	6.79
10	2.16	2.56	2.82	3.08	3.24	3.38	3.51	3.89	4.89	5.52	6.12	6.69	7.26
11	2.60	3.05	3.31	3.57	3.73	3.87	4.00	4.38	5.38	6.01	6.61	7.18	7.75
12	3.07	3.57	3.83	4.09	4.25	4.39	4.52	4.90	5.90	6.53	7.13	7.70	8.27
13	3.57	4.11	4.37	4.63	4.79	4.93	5.06	5.44	6.44	7.07	7.67	8.24	8.81
14	4.07	4.66	4.92	5.18	5.34	5.48	5.61	6.00	7.00	7.63	8.23	8.80	9.37
15	4.60	5.23	5.49	5.75	5.91	6.05	6.18	6.57	7.57	8.20	8.80	9.37	9.94
16	5.14	5.81	6.07	6.33	6.49	6.63	6.76	7.15	8.15	8.78	9.38	9.95	10.52
17	5.70	6.41	6.67	6.93	7.09	7.23	7.36	7.75	8.75	9.38	9.98	10.55	11.12
18	6.26	7.01	7.27	7.53	7.69	7.83	7.96	8.35	9.35	9.98	10.58	11.15	11.72
19	6.84	7.63	7.89	8.15	8.31	8.45	8.58	8.97	9.97	10.60	11.20	11.77	12.34
20	7.43	8.26	8.52	8.78	8.94	9.08	9.21	9.60	10.60	11.23	11.83	12.40	12.97
21	8.03	8.90	9.16	9.42	9.58	9.72	9.85	10.24	11.24	11.87	12.47	13.04	13.61
22	8.64	9.54	9.80	10.06	10.22	10.36	10.49	10.88	11.88	12.51	13.11	13.68	14.25
23	9.26	10.2	10.46	10.72	10.88	11.02	11.15	11.54	12.54	13.17	13.77	14.34	14.91
24	9.89	10.9	11.16	11.42	11.58	11.72	11.85	12.24	13.24	13.87	14.47	15.04	15.61
25	10.5	11.5	11.76	12.02	12.18	12.32	12.45	12.84	13.84	14.47	15.07	15.64	16.21
26	11.2	12.2	12.46	12.72	12.88	13.02	13.15	13.54	14.54	15.17	15.77	16.34	16.91
27	11.8	12.9	13.14	13.40	13.56	13.70	13.83	14.22	15.22	15.85	16.45	17.02	17.59
28	12.5	13.6	13.84	14.10	14.26	14.40	14.53	14.92	15.92	16.55	17.15	17.72	18.29
29	13.1	14.3	14.54	14.80	14.96	15.10	15.23	15.62	16.62	17.25	17.85	18.42	19.00
30	13.8	15.0	15.22	15.48	15.64	15.78	15.91	16.30	17.30	17.93	18.53	19.10	19.67

\* Per gentile concessione di Catherine M. Thompson, *Biometrika*, vol. 32 (1941).

$$\Phi(x) = \frac{1}{\sqrt{2\pi}} \int_{-\infty}^x e^{-t^2/2} dt$$

x	.00	.01	.02	.03	.04	.05	.06	.07	.08	.09
0	.5000	.5040	.5080	.5120	.5160	.5199	.5239	.5279	.5319	.5359
1	.5398	.5438	.5478	.5517	.5557	.5596	.5636	.5675	.5714	.5753
2	.5793	.5832	.5871	.5910	.5948	.5987	.6026	.6064	.6103	.6141
3	.6179	.6217	.6255	.6293	.6331	.6368	.6406	.6443	.6480	.6517
4	.6554	.6591	.6628	.6664	.6700	.6736	.6772	.6808	.6844	.6879
5	.6915	.6950	.6985	.7019	.7054	.7088	.7123	.7157	.7190	.7224
6	.7257	.7291	.7324	.7357	.7389	.7422	.7454	.7486	.7517	.7549
7	.7580	.7611	.7642	.7673	.7704	.7734	.7764	.7794	.7823	.7852
8	.7881	.7910	.7939	.7967	.7995	.8023	.8051	.8078	.8106	.8133
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	.9895	.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	.9995	.9995	.9995	.9995
3.3	.9995	.9995	.9996	.9996	.9996	.9996	.9996	.9996	.9997	.9997
3.4	.9997	.9997	.9997	.9997	.9997	.9997	.9997	.9997	.9997	.9998
x	1.282	1.645	1.960	2.326	2.576	3.090	3.291	3.891	4.417	
Φ(x)	.90	.95	.975	.99	.995	.999	.9995	.99995	.999995	
2[1 - Φ(x)]	.20	.10	.05	.02	.01	.002	.001	.0001	.00001	

