

Πίνακες

- ΠΙΝΑΚΑΣ 1** Διωνυμική Κατανομή
- ΠΙΝΑΚΑΣ 2** Τυποποιημένη Κανονική Κατανομή
- ΠΙΝΑΚΑΣ 3** Ποσοστιαία Σημεία της Κατανομής t
- ΠΙΝΑΚΑΣ 4** Ποσοστιαία Σημεία της Κατανομής X^2
- ΠΙΝΑΚΑΣ 5** Ποσοστιαία Σημεία της κατανομής F
- ΠΙΝΑΚΑΣ 6** Πίνακας Τυχαίων Αριθμών

Πίνακας 1

Διωνυμική Κατανομή

$$P(X \leq x) = \sum_{k=0}^x \frac{n!}{k!(n-k)!} p^k (1-p)^{n-k}$$

		p									
n	x	0.05	0.10	0.15	0.20	0.25	0.30	0.35	0.40	0.45	0.50
2	0	0.9025	0.8100	0.7225	0.6400	0.5625	0.4900	0.4225	0.3600	0.3025	0.2500
	1	0.9975	0.9900	0.9775	0.9600	0.9375	0.9100	0.8775	0.8400	0.7975	0.7500
	2	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
3	0	0.8574	0.7290	0.6141	0.5120	0.4219	0.3430	0.2746	0.2160	0.1664	0.1250
	1	0.9928	0.9720	0.9392	0.8960	0.8438	0.7840	0.7182	0.6480	0.5748	0.5000
	2	0.9999	0.9990	0.9966	0.9920	0.9844	0.9730	0.9571	0.9360	0.9089	0.8750
	3	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
4	0	0.8145	0.6561	0.5220	0.4096	0.3164	0.2401	0.1785	0.1296	0.0915	0.0625
	1	0.9860	0.9477	0.8905	0.8192	0.7383	0.6517	0.5630	0.4752	0.3910	0.3125
	2	0.9995	0.9963	0.9880	0.9728	0.9492	0.9163	0.8735	0.8208	0.7585	0.6875
	3	1.0000	0.9999	0.9995	0.9984	0.9961	0.9919	0.9850	0.9744	0.9590	0.9375
	4	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
5	0	0.7738	0.5905	0.4437	0.3277	0.2373	0.1681	0.1160	0.0778	0.0503	0.0312
	1	0.9774	0.9185	0.8352	0.7373	0.6328	0.5282	0.4284	0.3370	0.2562	0.1875
	2	0.9988	0.9914	0.9734	0.9421	0.8965	0.8369	0.7648	0.6826	0.5931	0.5000
	3	1.0000	0.9995	0.9978	0.9933	0.9844	0.9692	0.9460	0.9130	0.8688	0.8125
	4	1.0000	1.0000	0.9999	0.9997	0.9990	0.9976	0.9947	0.9898	0.9815	0.9688
	5	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
6	0	0.7351	0.5314	0.3771	0.2621	0.1780	0.1176	0.0754	0.0467	0.0277	0.0156
	1	0.9672	0.8857	0.7765	0.6553	0.5339	0.4202	0.3191	0.2333	0.1636	0.1094
	2	0.9978	0.9842	0.9527	0.9011	0.8306	0.7443	0.6471	0.5443	0.4415	0.3438
	3	0.9999	0.9987	0.9941	0.9830	0.9624	0.9295	0.8826	0.8208	0.7447	0.6562
	4	1.0000	0.9999	0.9996	0.9984	0.9954	0.9891	0.9777	0.9590	0.9308	0.8906
	5	1.0000	1.0000	1.0000	0.9999	0.9998	0.9993	0.9982	0.9959	0.9917	0.9844
	6	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
7	0	0.6983	0.4783	0.3206	0.2097	0.1335	0.0824	0.0490	0.0280	0.0152	0.0078
	1	0.9556	0.8503	0.7166	0.5767	0.4449	0.3294	0.2338	0.1586	0.1024	0.0625
	2	0.9962	0.9743	0.9262	0.8520	0.7564	0.6471	0.5323	0.4199	0.3164	0.2266
	3	0.9998	0.9973	0.9879	0.9667	0.9294	0.8740	0.8002	0.7102	0.6083	0.5000
	4	1.0000	0.9998	0.9988	0.9953	0.9871	0.9712	0.9444	0.9037	0.8471	0.7734
	5	1.0000	1.0000	0.9999	0.9996	0.9987	0.9962	0.9910	0.9812	0.9643	0.9375
	6	1.0000	1.0000	1.0000	1.0000	0.9999	0.9998	0.9994	0.9984	0.9963	0.9922
	7	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
8	0	0.6634	0.4305	0.2725	0.1678	0.1001	0.0576	0.0319	0.0168	0.0084	0.0039
	1	0.9428	0.8131	0.6572	0.5033	0.3671	0.2553	0.1691	0.1064	0.0632	0.0352

(Συνεχίζεται)

Πίνακας 1
(συνέχεια)

Διωνυμική Κατανομή

$$P(X \leq x) = \sum_{k=0}^x \frac{n!}{k!(n-k)!} p^k (1-p)^{n-k}$$

	2	0.9942	0.9619	0.8948	0.7969	0.6785	0.5518	0.4278	0.3154	0.2201	0.1445
	3	0.9996	0.9950	0.9786	0.9437	0.8862	0.8059	0.7064	0.5941	0.4770	0.3633
	4	1.0000	0.9996	0.9971	0.9896	0.9727	0.9420	0.8939	0.8263	0.7396	0.6367
	5	1.0000	1.0000	0.9998	0.9988	0.9958	0.9887	0.9747	0.9502	0.9115	0.8555
	6	1.0000	1.0000	1.0000	0.9999	0.9996	0.9987	0.9964	0.9915	0.9819	0.9648
	7	1.0000	1.0000	1.0000	1.0000	1.0000	0.9999	0.9998	0.9993	0.9983	0.9961
	8	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
9	0	0.6302	0.3874	0.2316	0.1342	0.0751	0.0404	0.0207	0.0101	0.0046	0.0020
	1	0.9288	0.7748	0.5995	0.4362	0.3003	0.1960	0.1211	0.0705	0.0385	0.0195
	2	0.9916	0.9470	0.8591	0.7382	0.6007	0.4628	0.3373	0.2318	0.1495	0.0898
	3	0.9994	0.9917	0.9661	0.9144	0.8343	0.7297	0.6089	0.4836	0.3614	0.2539
	4	1.0000	0.9991	0.9944	0.9804	0.9511	0.9012	0.8283	0.7334	0.6214	0.5000
	5	1.0000	0.9999	0.9994	0.9969	0.9900	0.9747	0.9464	0.9006	0.8342	0.7461
	6	1.0000	1.0000	1.0000	0.9997	0.9987	0.9957	0.9888	0.9750	0.9502	0.9102
	7	1.0000	1.0000	1.0000	1.0000	0.9999	0.9996	0.9986	0.9962	0.9909	0.9805
	8	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9999	0.9997	0.9992	0.9980
	9	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
10	0	0.5987	0.3487	0.1969	0.1074	0.0563	0.0282	0.0135	0.0060	0.0025	0.0010
	1	0.9139	0.7361	0.5443	0.3758	0.2440	0.1493	0.0860	0.0464	0.0233	0.0107
	2	0.9885	0.9298	0.8202	0.6778	0.5256	0.3828	0.2616	0.1673	0.0996	0.0547
	3	0.9990	0.9872	0.9500	0.8791	0.7759	0.6496	0.5138	0.3823	0.2660	0.1719
	4	0.9999	0.9984	0.9901	0.9672	0.9219	0.8497	0.7515	0.6331	0.5044	0.3770
	5	1.0000	0.9999	0.9986	0.9936	0.9803	0.9527	0.9051	0.8338	0.7384	0.6230
	6	1.0000	1.0000	0.9999	0.9991	0.9965	0.9894	0.9740	0.9452	0.8980	0.8281
	7	1.0000	1.0000	1.0000	0.9999	0.9996	0.9984	0.9952	0.9877	0.9726	0.9453
	8	1.0000	1.0000	1.0000	1.0000	1.0000	0.9999	0.9995	0.9983	0.9955	0.9893
	9	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9999	0.9997	0.9990
	10	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
11	0	0.5688	0.3138	0.1673	0.0859	0.0422	0.0198	0.0088	0.0036	0.0014	0.0005
	1	0.8981	0.6974	0.4922	0.3221	0.1971	0.1130	0.0606	0.0302	0.0139	0.0059
	2	0.9848	0.9104	0.7788	0.6174	0.4552	0.3127	0.2001	0.1189	0.0652	0.0327
	3	0.9984	0.9815	0.9306	0.8389	0.7133	0.5696	0.4256	0.2963	0.1911	0.1133
	4	0.9999	0.9972	0.9841	0.9496	0.8854	0.7897	0.6683	0.5328	0.3971	0.2744
	5	1.0000	0.9997	0.9973	0.9883	0.9657	0.9218	0.8513	0.7535	0.6331	0.5000
	6	1.0000	1.0000	0.9997	0.9980	0.9925	0.9784	0.9499	0.9006	0.8262	0.7256
	7	1.0000	1.0000	1.0000	0.9998	0.9988	0.9957	0.9878	0.9707	0.9390	0.8867
	8	1.0000	1.0000	1.0000	1.0000	0.9999	0.9994	0.9980	0.9941	0.9852	0.9673
	9	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9998	0.9993	0.9978	0.9941
	10	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9998	0.9995
	11	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
12	0	0.5404	0.2824	0.1422	0.0687	0.0317	0.0138	0.0057	0.0022	0.0008	0.0002
	1	0.8816	0.6590	0.4435	0.2749	0.1584	0.0850	0.0424	0.0196	0.0083	0.0032
	2	0.9804	0.8891	0.7358	0.5583	0.3907	0.2528	0.1513	0.0834	0.0421	0.0193
	3	0.9978	0.9744	0.9078	0.7946	0.6488	0.4925	0.3467	0.2253	0.1345	0.0730
	4	0.9998	0.9957	0.9761	0.9274	0.8424	0.7237	0.5833	0.4382	0.3044	0.1938
	5	1.0000	0.9995	0.9954	0.9806	0.9456	0.8822	0.7873	0.6652	0.5269	0.3872
	6	1.0000	0.9999	0.9993	0.9961	0.9857	0.9614	0.9154	0.8418	0.7393	0.6128
	7	1.0000	1.0000	0.9999	0.9994	0.9972	0.9905	0.9745	0.9427	0.8883	0.8062

(Συνεχίζεται)

Πίνακας 1
(συνέχεια)

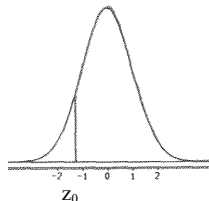
Διωνυμική Κατανομή

$$P(X \leq x) = \sum_{k=0}^x \frac{n!}{k!(n-k)!} p^k (1-p)^{n-k}$$

	8	1.0000	1.0000	1.0000	0.9999	0.9996	0.9983	0.9944	0.9847	0.9644	0.9270
	9	1.0000	1.0000	1.0000	1.0000	1.0000	0.9998	0.9992	0.9972	0.9921	0.9807
	10	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9999	0.9997	0.9989	0.9968
	11	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9999	0.9998
	12	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
13	0	0.5133	0.2542	0.1209	0.0550	0.0238	0.0097	0.0037	0.0013	0.0004	0.0001
	1	0.8646	0.6213	0.3983	0.2336	0.1267	0.0637	0.0296	0.0126	0.0049	0.0017
	2	0.9755	0.8661	0.6920	0.5017	0.3326	0.2025	0.1132	0.0579	0.0269	0.0112
	3	0.9969	0.9658	0.8820	0.7473	0.5843	0.4206	0.2783	0.1686	0.0929	0.0461
	4	0.9997	0.9935	0.9658	0.9009	0.7940	0.6543	0.5005	0.3530	0.2279	0.1334
	5	1.0000	0.9991	0.9924	0.9700	0.9198	0.8346	0.7159	0.5744	0.4268	0.2905
	6	1.0000	0.9999	0.9987	0.9930	0.9757	0.9376	0.8705	0.7712	0.6437	0.5000
	7	1.0000	1.0000	0.9998	0.9988	0.9944	0.9818	0.9538	0.9023	0.8212	0.7095
	8	1.0000	1.0000	1.0000	0.9998	0.9990	0.9960	0.9874	0.9679	0.9302	0.8666
	9	1.0000	1.0000	1.0000	1.0000	0.9999	0.9993	0.9975	0.9922	0.9797	0.9539
	10	1.0000	1.0000	1.0000	1.0000	1.0000	0.9999	0.9997	0.9987	0.9959	0.9888
	11	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9999	0.9995	0.9983
	12	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9999
	13	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
14	0	0.4877	0.2288	0.1028	0.0440	0.0068	0.0068	0.0024	0.0008	0.0002	0.0001
	1	0.8470	0.5846	0.3567	0.1979	0.0475	0.0475	0.0205	0.0081	0.0029	0.0009
	2	0.9699	0.8416	0.6479	0.4481	0.1608	0.1608	0.0839	0.0398	0.0170	0.0065
	3	0.9958	0.9559	0.8535	0.6982	0.3552	0.3552	0.2205	0.1243	0.0632	0.0287
	4	0.9986	0.9908	0.9533	0.8702	0.5842	0.5842	0.4227	0.2793	0.1672	0.0898
	5	1.0000	0.9985	0.9885	0.9561	0.7805	0.7805	0.6405	0.4859	0.3373	0.2120
	6	1.0000	0.9998	0.9978	0.9884	0.9067	0.9067	0.8164	0.6925	0.5461	0.3953
	7	1.0000	1.0000	0.9997	0.9976	0.9685	0.9685	0.9247	0.8499	0.7414	0.6047
	8	1.0000	1.0000	1.0000	0.9996	0.9917	0.9917	0.9757	0.9417	0.8811	0.7880
	9	1.0000	1.0000	1.0000	1.0000	0.9983	0.9983	0.9940	0.9825	0.9574	0.9102
	10	1.0000	1.0000	1.0000	1.0000	0.9998	0.9998	0.9989	0.9961	0.9886	0.9713
	11	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9999	0.9994	0.9978	0.9935
	12	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9999	0.9997	0.9991
	13	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9999
	14	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
15	0	0.4633	0.2059	0.0874	0.0352	0.0134	0.0047	0.0016	0.0005	0.0001	0.0000
	1	0.8290	0.5490	0.3186	0.1671	0.0802	0.0353	0.0142	0.0052	0.0017	0.0005
	2	0.9638	0.8159	0.6042	0.3980	0.2361	0.1268	0.0617	0.0271	0.0107	0.0037
	3	0.9945	0.9444	0.8227	0.6482	0.4613	0.2969	0.1727	0.0905	0.0424	0.0176
	4	0.9994	0.9873	0.9383	0.8358	0.6865	0.5155	0.3519	0.2173	0.1204	0.0592
	5	0.9999	0.9978	0.9832	0.9389	0.8516	0.7216	0.5643	0.4032	0.2608	0.1509
	6	1.0000	0.9997	0.9964	0.9819	0.9434	0.8689	0.7548	0.6098	0.4522	0.3036
	7	1.0000	1.0000	0.9994	0.9958	0.9827	0.9500	0.8868	0.7869	0.6535	0.5000
	8	1.0000	1.0000	0.9999	0.9992	0.9958	0.9848	0.9578	0.9050	0.8182	0.6964
	9	1.0000	1.0000	1.0000	0.9999	0.9992	0.9963	0.9876	0.9662	0.9231	0.8491
	10	1.0000	1.0000	1.0000	1.0000	0.9999	0.9993	0.9972	0.9907	0.9745	0.9408
	11	1.0000	1.0000	1.0000	1.0000	1.0000	0.9999	0.9995	0.9981	0.9937	0.9824
	12	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9999	0.9997	0.9989	0.9963
	13	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9999	0.9995
	14	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
	15	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

Πίνακας 2

Τυποποιημένη Κανονική Κατανομή



$$\Phi(z) = P(Z \leq z)$$

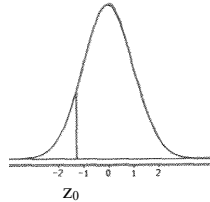
Τα στοιχεία του πίνακα εκφράζουν τις πιθανότητες $\Phi(z) = P(Z \leq z)$ που παριστάνονται από το εμβαδόν κάτω από την καμπύλη της τυποποιημένης κανονικής κατανομής αριστερά από το z .

z	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
-3.9	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
-3.8	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
-3.7	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
-3.6	0.0002	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
-3.5	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
-3.4	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0002
-3.3	0.0005	0.0005	0.0005	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0003
-3.2	0.0007	0.0007	0.0006	0.0006	0.0006	0.0006	0.0006	0.0005	0.0005	0.0005
-3.1	0.0010	0.0009	0.0009	0.0009	0.0008	0.0008	0.0008	0.0008	0.0007	0.0007
-3.0	0.0013	0.0013	0.0013	0.0012	0.0012	0.0011	0.0011	0.0011	0.0010	0.0010
-2.9	0.0019	0.0018	0.0018	0.0017	0.0016	0.0016	0.0015	0.0015	0.0014	0.0014
-2.8	0.0026	0.0025	0.0024	0.0023	0.0023	0.0022	0.0021	0.0021	0.0020	0.0019
-2.7	0.0035	0.0034	0.0033	0.0032	0.0031	0.0030	0.0029	0.0028	0.0027	0.0026
-2.6	0.0047	0.0045	0.0044	0.0043	0.0041	0.0040	0.0039	0.0038	0.0037	0.0036
-2.5	0.0062	0.0060	0.0059	0.0057	0.0055	0.0054	0.0052	0.0051	0.0049	0.0048
-2.4	0.0082	0.0080	0.0078	0.0075	0.0073	0.0071	0.0069	0.0068	0.0066	0.0064
-2.3	0.0107	0.0104	0.0102	0.0099	0.0096	0.0094	0.0091	0.0089	0.0087	0.0084
-2.2	0.0139	0.0136	0.0132	0.0129	0.0125	0.0122	0.0119	0.0116	0.0113	0.0110
-2.1	0.0179	0.0174	0.0170	0.0166	0.0162	0.0158	0.0154	0.0150	0.0146	0.0143
-2.0	0.0227	0.0222	0.0217	0.0212	0.0207	0.0202	0.0197	0.0192	0.0188	0.0183
-1.9	0.0287	0.0281	0.0274	0.0268	0.0262	0.0256	0.0250	0.0244	0.0239	0.0233
-1.8	0.0359	0.0351	0.0344	0.0336	0.0329	0.0322	0.0314	0.0307	0.0301	0.0294
-1.7	0.0446	0.0436	0.0427	0.0418	0.0409	0.0401	0.0392	0.0384	0.0375	0.0367
-1.6	0.0548	0.0537	0.0526	0.0516	0.0505	0.0495	0.0485	0.0475	0.0465	0.0455
-1.5	0.0668	0.0655	0.0643	0.0630	0.0618	0.0606	0.0594	0.0582	0.0571	0.0559
-1.4	0.0808	0.0793	0.0778	0.0764	0.0749	0.0735	0.0721	0.0708	0.0694	0.0681
-1.3	0.0968	0.0951	0.0934	0.0918	0.0901	0.0885	0.0869	0.0853	0.0838	0.0823
-1.2	0.1151	0.1131	0.1112	0.1093	0.1075	0.1056	0.1038	0.1020	0.1003	0.0985
-1.1	0.1357	0.1335	0.1314	0.1292	0.1271	0.1251	0.1230	0.1210	0.1190	0.1170
-1.0	0.1587	0.1562	0.1539	0.1515	0.1492	0.1469	0.1446	0.1423	0.1401	0.1379
-0.9	0.1841	0.1814	0.1788	0.1762	0.1736	0.1711	0.1685	0.1660	0.1635	0.1611
-0.8	0.2119	0.2090	0.2061	0.2033	0.2005	0.1977	0.1949	0.1921	0.1894	0.1867
-0.7	0.2420	0.2389	0.2358	0.2327	0.2296	0.2266	0.2236	0.2206	0.2177	0.2148
-0.6	0.2743	0.2709	0.2676	0.2643	0.2611	0.2578	0.2546	0.2514	0.2483	0.2451
-0.5	0.3085	0.3050	0.3015	0.2981	0.2946	0.2912	0.2877	0.2843	0.2810	0.2776
-0.4	0.3446	0.3409	0.3372	0.3336	0.3300	0.3264	0.3228	0.3192	0.3156	0.3121
-0.3	0.3821	0.3783	0.3745	0.3707	0.3669	0.3632	0.3594	0.3557	0.3520	0.3483
-0.2	0.4207	0.4168	0.4129	0.4090	0.4052	0.4013	0.3974	0.3936	0.3897	0.3859
-0.1	0.4602	0.4562	0.4522	0.4483	0.4443	0.4404	0.4364	0.4325	0.4286	0.4247
-0.0	0.5000	0.4960	0.4920	0.4880	0.4840	0.4801	0.4761	0.4721	0.4681	0.4641

(Συνεχίζεται)

Πίνακας 2
(συνέχεια)

Τυποποιημένη Κανονική Κατανομή

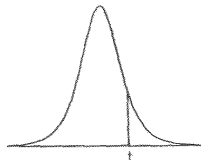


$$\Phi(z) = P(Z \leq z)$$

z	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
0.0	0.5000	0.5040	0.5080	0.5120	0.5160	0.5199	0.5239	0.5279	0.5319	0.5359
0.1	0.5398	0.5438	0.5478	0.5517	0.5557	0.5596	0.5636	0.5675	0.5714	0.5753
0.2	0.5793	0.5832	0.5871	0.5910	0.5948	0.5987	0.6026	0.6064	0.6103	0.6141
0.3	0.6179	0.6217	0.6255	0.6293	0.6331	0.6368	0.6406	0.6443	0.6480	0.6517
0.4	0.6554	0.6591	0.6628	0.6664	0.6700	0.6736	0.6772	0.6808	0.6844	0.6879
0.5	0.6915	0.6950	0.6985	0.7019	0.7054	0.7088	0.7123	0.7157	0.7190	0.7224
0.6	0.7257	0.7291	0.7324	0.7357	0.7389	0.7422	0.7454	0.7486	0.7517	0.7549
0.7	0.7580	0.7611	0.7642	0.7673	0.7704	0.7734	0.7764	0.7794	0.7823	0.7852
0.8	0.7881	0.7910	0.7939	0.7967	0.7995	0.8023	0.8051	0.8078	0.8106	0.8133
0.9	0.8159	0.8186	0.8212	0.8238	0.8264	0.8289	0.8315	0.8340	0.8365	0.8389
1.0	0.8413	0.8438	0.8461	0.8485	0.8508	0.8531	0.8554	0.8577	0.8599	0.8621
1.1	0.8643	0.8665	0.8686	0.8708	0.8729	0.8749	0.8770	0.8790	0.8810	0.8830
1.2	0.8849	0.8869	0.8888	0.8907	0.8925	0.8944	0.8962	0.8980	0.8997	0.9015
1.3	0.9032	0.9049	0.9066	0.9082	0.9099	0.9115	0.9131	0.9147	0.9162	0.9177
1.4	0.9192	0.9207	0.9222	0.9236	0.9251	0.9265	0.9279	0.9292	0.9306	0.9319
1.5	0.9332	0.9345	0.9357	0.9370	0.9382	0.9394	0.9406	0.9418	0.9429	0.9441
1.6	0.9452	0.9463	0.9474	0.9484	0.9495	0.9505	0.9515	0.9525	0.9535	0.9545
1.7	0.9554	0.9564	0.9573	0.9582	0.9591	0.9599	0.9608	0.9616	0.9625	0.9633
1.8	0.9641	0.9649	0.9656	0.9664	0.9671	0.9678	0.9686	0.9693	0.9699	0.9706
1.9	0.9713	0.9719	0.9726	0.9732	0.9738	0.9744	0.9750	0.9756	0.9761	0.9767
2.0	0.9772	0.9778	0.9783	0.9788	0.9793	0.9798	0.9803	0.9808	0.9812	0.9817
2.1	0.9821	0.9826	0.9830	0.9834	0.9838	0.9842	0.9846	0.9850	0.9854	0.9857
2.2	0.9861	0.9864	0.9868	0.9871	0.9875	0.9878	0.9881	0.9884	0.9887	0.9890
2.3	0.9893	0.9896	0.9898	0.9901	0.9904	0.9906	0.9909	0.9911	0.9913	0.9916
2.4	0.9918	0.9920	0.9922	0.9925	0.9927	0.9929	0.9931	0.9932	0.9934	0.9936
2.5	0.9938	0.9940	0.9941	0.9943	0.9945	0.9946	0.9948	0.9949	0.9951	0.9952
2.6	0.9953	0.9955	0.9956	0.9957	0.9959	0.9960	0.9961	0.9962	0.9963	0.9964
2.7	0.9965	0.9966	0.9967	0.9968	0.9969	0.9970	0.9971	0.9972	0.9973	0.9974
2.8	0.9974	0.9975	0.9976	0.9977	0.9977	0.9978	0.9979	0.9979	0.9980	0.9981
2.9	0.9981	0.9982	0.9982	0.9983	0.9984	0.9984	0.9985	0.9985	0.9986	0.9986
3.0	0.9987	0.9987	0.9987	0.9988	0.9988	0.9989	0.9989	0.9989	0.9990	0.9990
3.1	0.9990	0.9991	0.9991	0.9991	0.9992	0.9992	0.9992	0.9992	0.9993	0.9993
3.2	0.9993	0.9993	0.9994	0.9994	0.9994	0.9994	0.9994	0.9995	0.9995	0.9995
3.3	0.9995	0.9995	0.9995	0.9996	0.9996	0.9996	0.9996	0.9996	0.9996	0.9997
3.4	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9998
3.5	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998
3.6	0.9998	0.9998	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
3.7	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
3.8	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
3.9	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

Πίνακας 3

Ποσοστιαία Σημεία της Κατανομής t



Τα στοιχεία του πίνακα εκφράζουν τα $(1-\alpha)$ ποσοστιαία σημεία της κατανομής t με ν βαθμούς ελευθερίας, δηλαδή τις τιμές $t_{\nu, 1-\alpha}$ για τις οποίες $P(T \leq t_{\nu, 1-\alpha})=1-\alpha$.

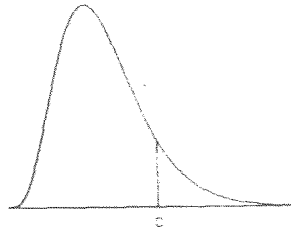
Τα κατώτερα ποσοστιαία σημεία προσδιορίζονται από την σχέση $t_{\nu, \alpha} = -t_{\nu, 1-\alpha}$.

$1-\alpha = \text{εμβαδόν}$

ν	0.550	0.600	0.650	0.700	0.750	0.800	0.850	0.900	0.950	0.975	0.990	0.995	0.997	0.998	0.999
1	0.158	0.325	0.510	0.727	1.000	1.376	1.963	3.078	6.314	12.706	31.821	63.657	106.100	159.156	318.317
2	0.142	0.289	0.445	0.617	0.816	1.061	1.386	1.886	2.920	4.303	6.965	9.925	12.852	15.764	22.327
3	0.137	0.277	0.424	0.584	0.765	0.978	1.250	1.638	2.353	3.182	4.541	5.841	6.994	8.053	10.215
4	0.134	0.271	0.414	0.569	0.741	0.941	1.190	1.533	2.132	2.776	3.747	4.604	5.321	5.951	7.173
5	0.132	0.267	0.408	0.559	0.727	0.920	1.156	1.476	2.015	2.571	3.365	4.032	4.570	5.030	5.893
6	0.131	0.265	0.404	0.553	0.718	0.906	1.134	1.440	1.943	2.447	3.143	3.707	4.152	4.524	5.208
7	0.130	0.263	0.402	0.549	0.711	0.896	1.119	1.415	1.895	2.365	2.998	3.499	3.887	4.207	4.785
8	0.130	0.262	0.399	0.546	0.706	0.889	1.108	1.397	1.860	2.306	2.896	3.355	3.705	3.991	4.501
9	0.129	0.261	0.398	0.543	0.703	0.883	1.100	1.383	1.833	2.262	2.821	3.250	3.573	3.835	4.297
10	0.129	0.260	0.397	0.542	0.700	0.879	1.093	1.372	1.812	2.228	2.764	3.169	3.472	3.716	4.144
11	0.129	0.260	0.396	0.540	0.679	0.876	1.088	1.363	1.796	2.201	2.718	3.160	3.393	3.624	4.025
12	0.128	0.259	0.395	0.539	0.695	0.873	1.083	1.356	1.782	2.179	2.681	3.055	3.330	3.550	3.930
13	0.128	0.259	0.394	0.537	0.694	0.870	1.079	1.350	1.771	2.160	2.650	3.012	3.278	3.489	3.852
14	0.128	0.258	0.393	0.537	0.692	0.868	1.076	1.345	1.761	2.145	2.624	2.977	3.234	3.438	3.787
15	0.128	0.258	0.393	0.536	0.691	0.866	1.074	1.341	1.753	2.131	2.602	2.947	3.197	3.395	3.733
16	0.128	0.258	0.392	0.535	0.690	0.865	1.071	1.337	1.746	2.120	2.583	2.921	3.165	3.358	3.686
17	0.128	0.257	0.392	0.534	0.689	0.863	1.069	1.333	1.740	2.110	2.567	2.898	3.138	3.326	3.646
18	0.127	0.257	0.392	0.534	0.688	0.862	1.067	1.330	1.734	2.101	2.552	2.878	3.113	3.298	3.610
19	0.127	0.257	0.391	0.533	0.688	0.861	1.065	1.328	1.729	2.093	2.539	2.861	3.092	3.273	3.579
20	0.127	0.257	0.391	0.533	0.687	0.860	1.064	1.325	1.725	2.086	2.528	2.845	3.073	3.251	3.552
21	0.127	0.257	0.391	0.532	0.686	0.859	1.063	1.323	1.721	2.080	2.518	2.831	3.056	3.231	3.527
22	0.127	0.256	0.390	0.532	0.686	0.858	1.061	1.321	1.717	2.074	2.508	2.819	3.041	3.214	3.505
23	0.127	0.256	0.390	0.532	0.685	0.858	1.060	1.319	1.714	2.069	2.500	2.807	3.027	3.198	3.485
24	0.127	0.256	0.390	0.531	0.685	0.857	1.059	1.318	1.711	2.064	2.492	2.797	3.014	3.183	3.467
25	0.127	0.256	0.390	0.531	0.684	0.856	1.058	1.316	1.708	2.060	2.485	2.787	3.003	3.170	3.450
26	0.127	0.256	0.390	0.531	0.684	0.856	1.058	1.315	1.706	2.056	2.479	2.779	2.992	3.158	3.44
27	0.127	0.256	0.389	0.531	0.684	0.855	1.057	1.314	1.703	2.052	2.473	2.771	2.982	3.147	3.42
28	0.127	0.256	0.389	0.530	0.683	0.855	1.056	1.313	1.701	2.048	2.467	2.763	2.973	3.136	3.408
29	0.127	0.256	0.389	0.530	0.683	0.854	1.055	1.311	1.699	2.045	2.462	2.756	2.965	3.127	3.396
30	0.127	0.256	0.389	0.530	0.683	0.854	1.055	1.310	1.697	2.042	2.457	2.750	2.957	3.118	3.385
31	0.127	0.256	0.389	0.530	0.682	0.853	1.054	1.309	1.696	2.040	2.453	2.744	2.950	3.109	3.375
32	0.127	0.255	0.389	0.530	0.682	0.853	1.053	1.309	1.694	2.037	2.449	2.738	2.943	3.102	3.365
33	0.127	0.255	0.389	0.530	0.682	0.853	1.053	1.308	1.692	2.035	2.445	2.733	2.937	3.094	3.356
34	0.127	0.255	0.389	0.529	0.682	0.852	1.052	1.307	1.691	2.032	2.441	2.728	2.931	3.088	3.348
35	0.127	0.255	0.389	0.529	0.682	0.852	1.052	1.306	1.690	2.030	2.438	2.724	2.926	3.081	3.340
40	0.126	0.255	0.388	0.529	0.681	0.851	1.050	1.303	1.684	2.021	2.423	2.704	2.902	3.055	3.307
50	0.126	0.255	0.388	0.528	0.679	0.849	1.047	1.299	1.676	2.009	2.403	2.678	2.870	3.018	3.261
60	0.126	0.255	0.387	0.527	0.679	0.848	1.045	1.296	1.671	2.000	2.390	2.660	2.849	2.994	3.232
120	0.126	0.254	0.386	0.526	0.677	0.845	1.041	1.289	1.658	1.980	2.358	2.617	2.798	2.935	3.160
inf	0.126	0.253	0.385	0.524	0.674	0.842	1.036	1.282	1.645	1.960	2.326	2.576	2.748	2.878	3.090

Πίνακας 4

Ποσοστιαία Σημεία της Κατανομής X^2



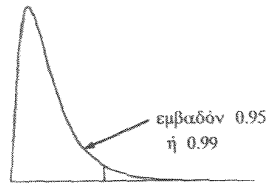
Τα στοιχεία του πίνακα εκφράζουν τα $(1-\alpha)$ ποσοστιαία σημεία της κατανομής X^2 με ν βαθμούς ελευθερίας δηλαδή τις μέσες τιμές $X^2_{\nu, 1-\alpha}$ για τις οποίες $P(X^2 \leq X^2_{\nu, 1-\alpha}) = 1 - \alpha$.

$1-\alpha$ = εμβαδόν

ν	0.010	0.050	0.100	0.300	0.500	0.700	0.900	0.950	0.990	0.999
1	0.0002	0.0039	0.0158	0.1485	0.4549	1.0742	2.7055	3.8415	6.6349	10.8277
2	0.0201	0.1026	0.2107	0.7133	1.3863	2.4079	4.6052	5.9915	9.2103	13.8155
3	0.1148	0.3518	0.5844	1.4237	2.3660	3.6649	6.2514	7.8147	11.3449	16.2663
4	0.2971	0.7107	1.0636	2.1947	3.3567	4.8784	7.7794	9.4877	13.2767	18.4669
5	0.5543	1.1455	1.6103	2.9999	4.3515	6.0644	9.2364	11.0705	15.0863	20.5150
6	0.8721	1.6354	2.2041	3.8276	5.3481	7.2311	10.6446	12.5916	16.8119	22.4578
7	1.2390	2.1674	2.8331	4.6713	6.3458	8.3834	12.0170	14.0671	18.4753	24.3220
8	1.6465	2.7326	3.4895	5.5274	7.3441	9.5245	13.3616	15.5073	20.0902	26.1246
9	2.0879	3.3251	4.1682	6.3933	8.3428	10.6564	14.6837	16.9190	21.6660	27.8771
10	2.5582	3.9403	4.8652	7.2672	9.3418	11.7807	15.9872	18.3070	23.2093	29.5884
11	3.0535	4.5748	5.5778	8.1479	10.3410	12.8987	17.2750	19.6751	24.7250	31.2642
12	3.5706	5.2260	6.3038	9.0343	11.3403	14.0111	18.5493	21.0261	26.2170	32.9097
13	4.1069	5.8919	7.0415	9.9257	12.3398	15.1187	19.8119	22.3620	27.6882	34.5278
14	4.6604	6.5706	7.7895	10.8215	13.3393	16.2221	21.0641	23.6848	29.1413	36.1235
15	5.2293	7.2609	8.5468	11.7212	14.3389	17.3217	22.3071	24.9958	30.5779	37.6973

Πίνακας 5

Τα 0.95 και 0.99 Ποσοστιαία Σημεία της Κατανομής F



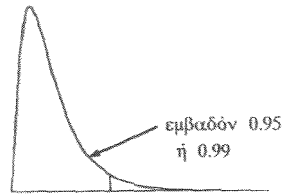
Τα στοιχεία του πίνακα εκφράζουν τα $(1-\alpha)$ ποσοστιαία σημεία της κατανομής F με v_1 και v_2 βαθμούς ελευθερίας, δηλαδή τις τιμές $F_{v_1, v_2, 1-\alpha}$ για τις οποίες $P(F \leq F_{v_1, v_2, 1-\alpha}) = 1-\alpha$ για $1-\alpha = 0.95, 0.99$. Τα κατώτερα ποσοστιαία σημεία προσδιορίζονται από την σχέση $F_{v_1, v_2, \alpha} = 1/F_{v_2, v_1, 1-\alpha}$.

v_1	1	2	3	4	5	6	7	8	9	10
1	161.44 4052.18	18.5121 98.5057	10.1282 34.1169	7.7086 21.1977	6.6079 16.2579	5.9874 13.7452	5.5913 12.2462	5.3176 11.2587	5.1174 10.5614	4.9646 10.0443
2	199.50 4999.50	19.0000 99.0001	9.5522 30.8256	6.9443 18.0000	5.7860 13.2739	5.1431 10.9246	4.7373 9.5464	4.4590 8.6490	4.2566 8.0215	4.1029 7.5594
3	215.69 5403.35	19.1634 99.1692	9.2769 29.4571	6.5913 16.6946	5.4094 12.0600	4.7570 9.7796	4.3469 8.4514	4.0661 7.5909	3.8625 6.9920	3.7083 6.5523
4	224.57 5624.58	19.2468 99.2495	9.1169 28.7099	6.3881 15.9771	5.1923 11.3920	4.5337 9.1482	4.1203 7.8465	3.8379 7.0061	3.6331 6.4221	3.4780 5.9944
5	230.16 5763.65	19.2971 99.2982	9.0135 28.2374	6.2559 15.5215	5.0502 10.9670	4.3874 8.7460	3.9715 7.4605	3.6876 6.6319	3.4816 6.0570	3.3259 5.6363
6	233.98 5858.99	19.3294 99.3317	8.9405 27.9105	6.1632 15.2071	4.9503 10.6721	4.2839 8.4661	3.8660 7.1913	3.5806 6.3707	3.3738 5.8018	3.2172 5.3858
7	236.78 5928.36	19.3533 99.3545	8.8867 27.6723	6.0942 14.9757	4.8758 10.4556	4.2067 8.2601	3.7870 6.9929	3.5004 6.1777	3.2928 5.6128	3.1355 5.2001
8	238.89 5981.07	19.3716 99.3772	8.8450 27.4889	6.0412 14.7987	4.8184 10.2893	4.1468 8.1016	3.7258 6.8400	3.4382 6.0289	3.2296 5.4671	3.0717 5.0566
9	240.55 6022.47	19.3854 99.3896	8.8122 27.3453	5.9989 14.6591	4.7724 10.1577	4.0990 7.9762	3.6767 6.7187	3.3881 5.9106	3.1789 5.3512	3.0204 4.9424
10	241.89 6055.85	19.3959 99.4035	8.7854 27.2289	5.9643 14.5460	4.7351 10.0512	4.0599 7.8740	3.6365 6.6201	3.3472 5.8144	3.1373 5.2565	2.9783 4.8492
11	242.97 6083.32	19.4042 99.4069	8.7634 27.1327	5.9359 14.4522	4.7040 9.9626	4.0275 7.7896	3.6030 6.5382	3.3130 5.7344	3.1024 5.1779	2.9430 4.7715
12	243.91 6106.32	19.4124 99.4132	8.7448 27.0510	5.9118 14.3736	4.6776 9.8882	3.9999 7.7182	3.5747 6.4691	3.2839 5.6667	3.0730 5.1114	2.9130 4.7058
13	244.67 6125.86	19.4190 99.4260	8.7288 26.9824	5.8912 14.3066	4.6552 9.8250	3.9763 7.6575	3.5504 6.4100	3.2590 6.6088	3.0476 5.0545	2.8871 4.6496
14	245.35 6142.67	19.4243 99.4311	8.7149 26.9244	5.8732 14.2485	4.6358 9.7700	3.9559 7.6049	3.5293 6.3590	3.2374 5.5589	3.0254 5.0052	2.8647 4.6008
15	245.97 6157.28	19.4287 99.4288	8.7028 26.8723	5.8578 14.1982	4.6189 9.7221	3.9380 7.5591	3.5108 6.3144	3.2183 5.5151	3.0061 4.9621	2.8450 4.5581

(Συνεχίζεται)

Πίνακας 5
(συνέχεια)

Τα 0.95 και 0.99 Ποσοστιαία Σημεία της Κατανομής F



ν_1	ν_2									
	11	12	13	14	15	16	17	18	19	20
1	4.84422 9.64599	4.74720 9.33015	4.66725 9.07371	4.60006 8.86159	4.54315 8.68315	4.49401 8.53096	4.45122 8.39981	4.41398 8.28537	4.38066 8.18505	4.35128 8.09599
2	3.98223 7.20570	3.88526 6.92666	3.80552 6.70103	3.73883 6.51497	3.68235 6.35891	3.63378 6.22627	3.59151 6.11207	3.55452 6.01283	3.52194 5.92587	3.49283 5.84890
3	3.58741 6.21668	3.49026 5.95250	3.41049 5.73935	3.34388 5.56388	3.28741 5.41692	3.23893 5.29215	3.19681 5.18499	3.15990 5.09190	3.12740 5.01024	3.09836 4.93822
4	3.35670 5.66834	3.25921 5.41194	3.17917 5.20533	3.11226 5.03540	3.05559 4.89317	3.00695 4.77257	2.96472 4.66896	2.92777 4.57903	2.89508 4.50031	2.86605 4.43073
5	3.20392 5.31599	3.10588 5.06433	3.02541 4.86162	2.95824 4.69495	2.90131 4.55560	2.85239 4.43739	2.81004 4.33595	2.77286 4.24784	2.74009 4.17077	2.71089 4.10268
6	3.09466 5.06922	2.99607 4.82063	2.91582 4.62035	2.84776 4.45583	2.79045 4.31829	2.74135 4.20165	2.69870 4.10150	2.66129 4.01464	2.62834 3.93860	2.59895 3.87141
7	3.01231 4.88613	2.91335 4.63949	2.83212 4.44098	2.76418 4.27785	2.70664 4.14154	2.65717 4.02596	2.61433 3.92672	2.57669 3.84061	2.54356 3.76528	2.51399 3.69874
8	2.94796 4.74445	2.84858 4.49936	2.76695 4.30206	2.69863 4.13997	2.64082 4.00443	2.59112 3.88955	2.54798 3.79093	2.51018 3.70541	2.47679 3.63052	2.44708 3.56444
9	2.89622 4.63151	2.79641 4.38749	2.71438 4.19110	2.64576 4.02970	2.58762 3.89477	2.53767 3.78043	2.49431 3.68223	2.45626 3.59706	2.42270 3.52253	2.39281 3.45668
10	2.85358 4.53927	2.75341 4.29607	2.67105 4.10023	2.60215 3.93937	2.54368 3.80498	2.49352 3.69089	2.44993 3.59307	2.41167 3.50817	2.37795 3.43384	2.34791 3.36817
11	2.81789 4.46247	2.71732 4.21978	2.63466 4.02449	2.56550 3.86403	2.50684 3.72989	2.45639 3.61614	2.41253 3.51850	2.37413 3.43376	2.34023 3.35962	2.31002 3.29412
12	2.78753 4.39744	2.68667 4.15524	2.60369 3.96034	2.53423 3.80012	2.47533 3.66628	2.42468 3.55267	2.38066 3.45517	2.34206 3.37063	2.30796 3.29653	2.27760 3.23112
13	2.76140 4.34163	2.66021 4.09984	2.57690 3.90521	2.50727 3.74524	2.44810 3.61155	2.39724 3.49813	2.35306 3.40070	2.31431 3.31620	2.28004 3.24020	2.24952 3.17688
14	2.73864 4.29320	2.63712 4.05175	2.55362 3.85731	2.48373 3.69754	2.42440 3.56398	2.37333 3.45065	2.32896 3.35334	2.29003 3.26891	2.25562 3.19492	2.22493 3.12961
15	2.71861 4.25082	2.61684 4.00965	2.53308 3.81538	2.46304 3.65568	2.40345 3.52222	2.35222 3.40898	2.30767 3.31196	2.26862 3.22730	2.23404 3.15335	2.20330 3.08802

Πίνακας 6

Τυχαίοι Αριθμοί στο διάστημα (0, 1)

3407	1440	6960	8675	5649	5793	1514
5044	9859	4658	7779	7986	0520	6697
0045	4999	4930	7408	7551	3124	0527
7536	1448	7843	4801	3147	3071	4749
7653	4231	1233	4409	0609	6448	2900
6157	1144	4779	0951	3757	9562	2354
6593	8668	4871	0946	3155	3941	9662
3187	7434	0315	4418	1569	1101	0043
4780	1071	6814	2733	7968	8541	1003
9414	6170	2581	1398	2429	4763	9192
1948	2360	7244	9682	5418	0596	4971
1843	0914	9705	7861	6861	7865	7293
4944	8903	0460	0188	0530	7790	9118
3882	3195	8287	3298	9532	9066	8225
6596	9009	2055	4081	4842	7852	5915
4793	2503	2906	6807	2028	1075	7175
2112	0232	5334	1443	7306	6418	9639
0743	1083	8071	9779	5973	1141	4393
8856	5352	3384	8891	9189	1680	3192
8027	4975	2346	5786	0693	5615	2047
3134	1688	4071	3766	0570	2142	3492
0633	9002	1305	2256	5956	9256	8979
8771	6069	1598	4275	6017	5946	8189
2672	1304	2186	8279	2430	4896	3698
3136	1916	8886	8617	9312	5070	2720
6490	7491	6562	5355	3794	3555	7510
8628	0501	4618	3364	6709	1289	0543
9270	0504	5018	7013	4423	2147	4089
5723	3807	4997	4699	2231	3193	8130
6228	8874	7271	2621	5746	6333	0345
7645	3379	8376	3030	0351	8290	3640
6842	5836	6203	6171	2698	4086	5469
6126	7792	9337	7773	7286	4236	1788
4956	0215	3468	8038	6144	9753	3131
1327	4736	6229	5965	7215	6458	3937
9188	1516	5279	5433	2254	5768	8718
0271	9627	9442	9217	4656	7603	8826
2127	1847	1331	5122	8332	8195	3322
2102	9201	2911	7318	7670	6079	2676
1706	6011	5280	5552	5180	4630	4747
7501	7635	2301	0889	6955	8113	4364
