

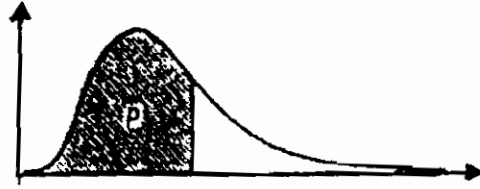
جدول التوزيعات الاحتمالية المختلفة

obaidkhanal.com

جدول (1-1) التوزيع الطبيعي المعياري

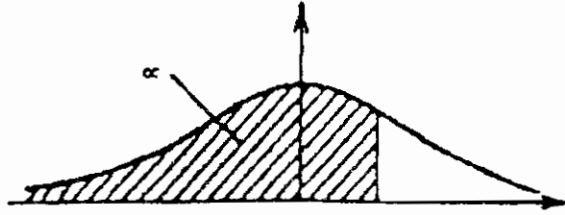
	-0.09	-0.08	-0.07	-0.06	-0.05	-0.04	-0.03	-0.02	-0.01	0.00	Z
										0.0013	-3.0
0.0014	0.0014	0.0015	0.0015	0.0016	0.0016	0.0017	0.0017	0.0018	0.0019	0.0019	-2.9
.0019	.0020	.0021	.0021	.0022	.0023	.0023	.0024	.0025	.0026	.0026	-2.8
.0026	.0027	.0028	.0029	.0030	.0031	.0032	.0033	.0034	.0035	.0035	-2.7
.0036	.0037	.0038	.0039	.0040	.0041	.0043	.0044	.0045	.0047	.0047	-2.6
.0048	.0049	.0051	.0052	.0054	.0055	.0057	.0059	.0060	.0062	.0062	-2.5
.0064	.0066	.0068	.0069	.0071	.0073	.0075	.0078	.0080	.0082	.0082	-2.4
.0084	.0087	.0089	.0091	.0094	.0096	.0099	.0102	.0104	.0107	.0107	-2.3
.0110	.0113	.0116	.0119	.0122	.0125	.0129	.0132	.0136	.0139	.0139	-2.2
.0143	.0146	.0150	.0154	.0158	.0162	.0166	.0170	.0174	.0179	.0179	-2.1
.0183	.0188	.0192	.0197	.0202	.0207	.0212	.0217	.0222	.0227	.0227	-2.0
0.0233	0.0239	0.0244	0.0250	0.0256	0.0262	0.0268	0.0274	0.0281	0.0287	0.0287	-1.9
.0294	.0301	.0307	.0314	.0322	.0329	.0336	.0344	.0351	.0359	.0359	-1.8
.0367	.0375	.0384	.0392	.0401	.0409	.0418	.0427	.0436	.0446	.0446	-1.7
.0455	.0465	.0475	.0485	.0495	.0505	.0516	.0526	.0537	.0548	.0548	-1.6
.0559	.0571	.0582	.0594	.0606	.0618	.0630	.0643	.0655	.0668	.0668	-1.5
.0681	.0694	.0708	.0721	.0735	.0749	.0764	.0778	.0793	.0808	.0808	-1.4
.0823	.0838	.0853	.0869	.0885	.0901	.0918	.0934	.0951	.0968	.0968	-1.3
.0985	.1003	.1020	.1038	.1056	.1075	.1093	.1112	.1131	.1151	.1151	-1.2
.1170	.1190	.1210	.1230	.1261	.1271	.1292	.1314	.1335	.1357	.1357	-1.1
.1370	.1401	.1423	.1446	.1469	.1492	.1515	.1539	.1562	.1587	.1587	-1.0
0.1611	0.1635	0.1660	0.1685	0.1711	0.1736	0.1762	0.1788	0.1814	0.1841	0.1841	-0.9
.1867	.1894	.1921	.1949	.1977	.2005	.2033	.2061	.2090	.2119	.2119	-0.8
.2148	.2177	.2206	.2236	.2266	.2296	.2327	.2358	.2389	.2420	.2420	-0.7
.2451	.2483	.2514	.2546	.2578	.2611	.2643	.2676	.2709	.2743	.2743	-0.6
.2776	.2810	.2843	.2877	.2912	.2946	.2981	.3015	.3050	.3085	.3085	-0.5
.3121	.3156	.3192	.3228	.3264	.3300	.3336	.3372	.3409	.3446	.3446	-0.4
.3483	.3520	.3557	.3594	.3632	.3669	.3707	.3745	.3783	.3821	.3821	-0.3
.3859	.3897	.3936	.3974	.4013	.4052	.4090	.4129	.4168	.4207	.4207	-0.2
.4247	.4286	.4325	.4364	.4404	.4443	.4483	.4522	.4562	.4602	.4602	-0.1
.4641	.4681	.4721	.4761	.4801	.4840	.4880	.4920	.4960	.5000	.5000	0.0
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	.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	.8079	.8106	.8133	
0.9	.8159	.8186	.8212	.8238	.8264	.8289	.8315	.8340	.8365	.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	.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	0.9773	0.9778	0.9783	0.9788	0.9793	0.9798	0.9803	0.9808	0.9812	0.9817	
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	.9939	.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	.9983	.9983	.9984	.9984	.9985	.9985	.9986	.9986	
3.0	0.9987										

جدول (2-2) توزیع X^2 - Chi Square



n	$X^2_{.999}$	$X^2_{.99}$	$X^2_{.95}$	$X^2_{.90}$	$X^2_{.85}$	$X^2_{.80}$	$X^2_{.75}$	$X^2_{.70}$	$X^2_{.65}$	$X^2_{.60}$	$X^2_{.55}$	$X^2_{.50}$	$X^2_{.45}$	$X^2_{.40}$	$X^2_{.35}$	$X^2_{.30}$
1	.000	.000	.001	.004	.016	.064	.148	.255	1.07	1.64	2.71	3.84	5.02	6.63	7.88	
2	.010	.020	.051	.103	.211	.446	.713	1.39	2.41	3.22	4.61	5.99	7.38	9.21	10.6	
3	.072	.115	.216	.352	.584	1.00	1.42	2.37	3.66	4.64	6.25	7.81	9.35	11.3	12.8	
4	.207	.297	.484	.711	1.06	1.65	2.20	3.36	4.88	5.99	7.78	9.49	11.1	13.3	14.7	
5	.412	.554	.831	1.15	1.61	2.34	3.00	4.35	6.06	7.29	9.24	11.1	12.8	15.1	16.7	
6	.676	.872	1.24	1.64	2.20	3.07	3.83	5.35	7.23	8.56	10.6	12.6	14.4	16.8	18.5	
7	.989	1.24	1.69	2.17	2.83	3.82	4.67	6.35	8.38	9.80	12.0	14.1	16.0	18.5	20.3	
8	1.34	1.65	2.18	2.73	3.49	4.59	5.53	7.34	9.52	11.0	13.4	15.5	17.5	20.1	22.0	
9	1.73	2.09	2.70	3.33	4.17	5.38	6.39	8.34	10.7	12.2	14.7	16.9	19.0	21.7	23.6	
10	2.16	2.56	3.23	3.94	4.87	6.18	7.27	9.34	11.8	13.4	16.0	18.3	20.5	23.2	25.2	
11	2.60	3.05	3.82	4.57	5.58	6.99	8.15	10.3	12.9	14.6	17.3	19.7	21.9	24.7	26.8	
12	3.07	3.57	4.40	5.23	6.30	7.81	9.03	11.3	14.0	15.8	18.5	21.0	23.3	26.2	28.3	
13	3.57	4.11	5.01	5.89	7.04	8.63	9.93	12.3	15.1	17.0	19.8	22.4	24.7	27.7	29.8	
14	4.07	4.66	5.63	6.57	7.79	9.47	10.8	13.3	16.2	18.2	21.1	23.7	26.1	29.1	31.3	
15	4.60	5.23	6.26	7.26	8.55	10.3	11.7	14.3	17.3	19.3	22.3	25.0	27.5	30.6	32.8	
16	5.14	5.81	6.91	7.96	9.31	11.2	12.6	15.3	18.4	20.5	23.5	26.3	28.8	32.0	34.3	
17	5.70	6.41	7.56	8.67	10.1	12.0	13.5	16.3	19.5	21.6	24.8	27.6	30.2	33.4	35.7	
18	6.26	7.01	8.23	9.39	10.9	12.9	14.4	17.9	20.6	22.8	26.0	28.9	31.5	34.8	37.2	
19	6.83	7.63	8.91	10.1	11.7	13.7	15.4	18.9	21.7	23.9	27.2	30.1	32.9	36.2	38.6	
20	7.43	8.26	9.59	10.9	12.6	14.6	16.3	19.3	22.8	25.0	28.4	31.4	34.2	37.6	40.1	
21	8.03	8.90	10.3	11.6	13.2	15.4	17.2	20.3	23.9	26.2	29.6	32.7	35.5	38.9	41.6	
22	8.64	9.54	11.0	12.3	14.0	16.3	18.1	21.3	24.9	27.3	30.8	33.9	36.8	40.3	42.8	
23	9.26	10.2	11.7	13.1	14.8	17.2	19.0	22.3	26.0	28.4	32.0	35.2	38.1	41.6	44.2	
24	9.89	10.9	12.4	13.8	15.7	18.1	19.9	23.3	27.1	29.6	33.2	36.4	39.4	43.0	45.6	
25	10.5	11.5	13.1	14.6	16.5	18.9	20.9	24.3	28.2	30.7	34.4	37.7	40.6	44.3	46.9	
26	11.2	12.2	13.8	15.4	17.3	19.8	21.8	25.3	29.3	31.8	35.6	38.9	41.9	45.6	48.3	
27	11.8	12.9	14.6	16.2	18.1	20.7	22.7	26.3	30.3	32.9	36.7	40.1	43.2	47.0	49.6	
28	12.5	13.6	15.3	16.9	18.9	21.6	23.6	27.3	31.4	34.0	37.9	41.3	44.5	48.3	51.0	
29	13.1	14.3	16.0	17.7	19.8	22.5	24.6	28.3	32.5	35.1	39.1	42.6	45.7	49.6	52.3	
30	13.8	15.0	16.8	18.5	20.6	23.4	25.5	29.3	33.5	36.2	40.3	43.8	47.0	50.9	53.7	
40	20.7	22.1	24.4	26.8	29.0	32.3	34.9	39.3	44.2	47.8	51.8	55.8	59.3	63.7	66.8	
50	28.0	29.7	32.3	34.8	37.7	41.4	44.3	49.3	54.7	58.2	63.2	67.5	71.4	76.2	79.5	
60	35.5	37.5	40.5	43.2	46.5	50.6	53.8	59.3	65.2	69.0	74.4	79.1	83.3	88.4	92.0	

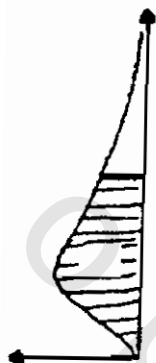
جدول (3-3) توزيع t



n	$\alpha = 0.6$	0.75	0.9	0.95	0.975	0.99	0.995	0.9975	0.999	0.9995
1	0.325	1.000	3.078	6.314	12.706	31.821	63.657	127.32	318.31	636.62
2	.289	0.816	1.886	2.920	4.303	6.965	9.925	14.089	22.326	31.598
3	.277	.765	1.638	2.353	3.182	4.541	5.841	7.453	10.213	12.924
4	.271	.741	1.533	2.132	2.776	3.747	4.604	5.598	7.173	8.610
5	0.267	0.727	1.476	2.015	2.571	3.365	4.032	4.773	5.893	6.869
6	.265	.718	1.440	1.943	2.447	3.143	3.707	4.317	5.208	5.959
7	.263	.711	1.415	1.895	2.365	2.998	3.499	4.029	4.785	5.408
8	.262	.706	1.397	1.860	2.306	2.896	3.355	3.833	4.501	5.041
9	.261	.703	1.383	1.833	2.262	2.821	3.250	3.690	4.297	4.781
10	0.260	0.700	1.372	1.812	2.228	2.764	3.169	3.581	4.144	4.587
11	.260	.697	1.363	1.796	2.201	2.718	3.106	3.497	4.025	4.437
12	.259	.695	1.356	1.782	2.179	2.681	3.055	3.428	3.930	4.318
13	.259	.694	1.350	1.771	2.160	2.650	3.012	3.372	3.852	4.221
14	.258	.692	1.345	1.761	2.145	2.624	2.977	3.326	3.787	4.140
15	0.258	0.691	1.341	1.753	2.131	2.602	2.947	3.286	3.733	4.073
16	.258	.690	1.337	1.746	2.120	2.583	2.921	3.252	3.686	4.015
17	.257	.689	1.333	1.740	2.110	2.567	2.898	3.222	3.646	3.965
18	.257	.688	1.330	1.734	2.101	2.552	2.878	3.197	3.610	3.922
19	.257	.688	1.328	1.729	2.093	2.539	2.861	3.174	3.579	3.883
20	0.257	0.687	1.325	1.725	2.086	2.528	2.845	3.153	3.552	3.850
21	.257	.686	1.323	1.721	2.080	2.518	2.831	3.135	3.527	3.819
22	.256	.686	1.321	1.717	2.074	2.508	2.819	3.119	3.505	3.792
23	.256	.685	1.319	1.714	2.069	2.500	2.807	3.104	3.485	3.767
24	.256	.685	1.318	1.711	2.064	2.492	2.797	3.091	3.467	3.745
25	0.256	0.684	1.316	1.708	2.060	2.485	2.787	3.078	3.450	3.725
26	.256	.684	1.315	1.706	2.056	2.479	2.779	3.067	3.435	3.707
27	.256	.684	1.314	1.703	2.052	2.473	2.771	3.057	3.421	3.690
28	.256	.683	1.313	1.701	2.048	2.467	2.763	3.047	3.408	3.674
29	.256	.683	1.311	1.699	2.045	2.462	2.756	3.038	3.396	3.659
30	0.256	0.683	1.310	1.697	2.042	2.457	2.750	3.030	3.385	3.646
40	.255	.681	1.303	1.684	2.021	2.423	2.704	2.971	3.307	3.551
60	.254	.679	1.296	1.671	2.000	2.390	2.660	2.915	3.232	3.460
120	.254	.677	1.289	1.658	1.980	2.358	2.617	2.860	3.160	3.373
∞	.253	.674	1.282	1.645	1.960	2.326	2.576	2.807	3.090	3.291

جدول (4-4) توزيع F

المقام/البسط	المقام															∞	
	1	2	3	4	5	6	7	8	9	10	12	15	20	30	60		120
90	39.9	49.5	53.6	55.8	57.2	58.2	58.9	59.4	59.9	60.2	60.7	61.2	61.7	62.3	62.8	63.1	63.3
95	161	200	216	225	230	234	237	239	241	242	244	246	248	250	252	253	254
975	648	800	864	900	922	937	948	957	963	969	977	983	985	993	1010	1016	1030
99	4.050	5.000	5.400	5.670	5.760	5.860	5.930	5.980	6.070	6.060	6.110	6.160	6.210	6.260	6.340	6.340	6.370
995	16.200	20.000	21.600	22.500	23.100	23.400	23.700	23.900	24.100	24.200	24.400	24.600	24.800	25.000	25.200	25.400	25.500
90	8.53	9.00	9.16	9.24	9.29	9.33	9.35	9.37	9.38	9.39	9.41	9.42	9.44	9.46	9.47	9.48	9.49
95	18.5	19.0	19.2	19.2	19.3	19.3	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.5	19.5	19.5	19.5
975	38.5	39.0	39.2	39.2	39.3	39.3	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.5	39.5	39.5	39.5
99	98.5	99.0	99.2	99.2	99.3	99.3	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.5	99.5	99.5	99.5
995	199	199	199	199	199	199	199	199	199	199	199	199	199	199	199	199	199
90	5.54	5.45	5.39	5.34	5.31	5.28	5.27	5.25	5.24	5.23	5.22	5.20	5.19	5.17	5.15	5.14	5.13
95	10.1	9.55	9.28	9.12	9.01	8.94	8.89	8.83	8.81	8.79	8.74	8.70	8.66	8.62	8.57	8.55	8.53
975	17.4	16.0	15.4	15.1	14.9	14.7	14.6	14.5	14.5	14.5	14.3	14.3	14.3	14.2	14.0	14.0	13.9
99	34.1	30.8	29.5	28.7	28.2	27.9	27.7	27.5	27.3	27.2	27.1	26.9	26.7	26.5	26.3	26.2	26.1
995	55.6	49.8	47.5	46.2	45.4	44.8	44.4	44.1	43.9	43.7	43.4	43.1	42.8	42.5	42.1	42.0	41.8
90	4.54	4.32	4.19	4.11	4.05	4.01	3.98	3.95	3.93	3.92	3.90	3.87	3.84	3.82	3.79	3.78	3.76
95	7.71	6.94	6.59	6.34	6.26	6.16	6.09	6.04	6.00	5.96	5.91	5.86	5.80	5.75	5.69	5.66	5.63
975	12.2	10.6	9.98	9.60	9.36	9.20	9.07	8.98	8.90	8.84	8.75	8.66	8.56	8.46	8.36	8.31	8.26
99	21.2	18.0	16.7	16.0	15.5	15.2	15.0	14.8	14.7	14.5	14.4	14.2	14.0	13.8	13.7	13.6	13.5
995	31.3	26.3	24.3	23.2	22.5	22.0	21.6	21.4	21.1	21.0	20.7	20.4	20.2	19.9	19.6	19.5	19.3
90	4.06	3.78	3.62	3.52	3.45	3.40	3.37	3.34	3.32	3.30	3.27	3.24	3.21	3.17	3.14	3.12	3.11
95	6.61	5.79	5.41	5.19	5.05	4.95	4.88	4.82	4.77	4.74	4.68	4.62	4.56	4.50	4.43	4.40	4.37
975	10.0	8.43	7.76	7.39	7.15	6.98	6.85	6.76	6.68	6.62	6.52	6.43	6.33	6.23	6.12	6.07	6.02
99	16.3	13.3	12.1	11.4	11.0	10.7	10.5	10.3	10.2	10.1	9.84	9.72	9.59	9.38	9.20	9.11	9.02
995	22.8	18.3	16.5	15.6	14.9	14.5	14.2	14.0	13.8	13.6	13.4	13.1	12.9	12.7	12.4	12.3	12.1
90	3.78	3.46	3.29	3.18	3.11	3.05	3.01	2.98	2.96	2.94	2.90	2.87	2.84	2.80	2.76	2.74	2.72
95	5.99	5.14	4.76	4.53	4.39	4.28	4.21	4.15	4.10	4.06	4.00	3.94	3.87	3.81	3.74	3.70	3.67
975	8.81	7.26	6.60	6.23	5.99	5.82	5.70	5.60	5.52	5.46	5.37	5.27	5.17	5.07	4.96	4.90	4.85
99	13.7	10.9	9.78	9.15	8.75	8.47	8.26	8.10	7.98	7.87	7.72	7.56	7.40	7.23	7.06	6.97	6.88
995	18.6	14.5	12.9	12.0	11.5	11.1	10.8	10.6	10.4	10.2	10.0	9.81	9.59	9.36	9.12	9.00	8.88
90	3.59	3.26	3.07	2.96	2.88	2.83	2.78	2.75	2.72	2.70	2.67	2.63	2.59	2.56	2.51	2.49	2.47
95	5.59	4.74	4.35	4.12	3.97	3.87	3.79	3.73	3.68	3.64	3.57	3.51	3.44	3.38	3.30	3.27	3.23
975	8.07	6.54	5.89	5.52	5.29	5.12	4.94	4.80	4.72	4.66	4.57	4.47	4.36	4.26	4.20	4.14	4.10
99	12.2	9.55	8.45	7.85	7.46	7.19	6.94	6.84	6.72	6.63	6.47	6.31	6.16	5.99	5.82	5.74	5.65
995	16.2	12.4	10.9	10.1	9.52	9.16	8.89	8.68	8.51	8.38	8.18	7.97	7.75	7.53	7.31	7.19	7.08
90	3.46	3.11	2.92	2.81	2.73	2.67	2.62	2.59	2.56	2.54	2.50	2.46	2.42	2.38	2.34	2.31	2.29
95	5.32	4.46	4.07	3.84	3.69	3.58	3.50	3.44	3.39	3.35	3.28	3.22	3.15	3.08	3.01	2.97	2.93
975	7.52	6.06	5.42	5.05	4.82	4.65	4.53	4.43	4.36	4.30	4.20	4.10	4.00	3.89	3.78	3.73	3.67
99	11.3	8.65	7.59	7.01	6.63	6.37	6.18	6.03	5.91	5.81	5.67	5.52	5.36	5.20	5.03	4.95	4.86
995	14.1	11.0	9.60	8.81	8.30	7.95	7.69	7.50	7.34	7.21	7.01	6.81	6.61	6.40	6.18	6.04	5.95



90	3.16	2.69	2.81	2.61	2.33	2.51	2.47	2.44	2.47	2.38	2.34	2.30	2.28	2.21	2.18	2.16
91	4.26	3.63	3.86	3.48	3.37	3.29	3.23	3.18	3.14	3.07	3.01	2.94	2.94	2.87	2.79	2.71
92	7.23	4.48	5.08	4.48	4.32	4.20	4.10	4.03	3.96	3.87	3.77	3.67	3.64	3.55	3.49	3.33
93	10.6	6.04	6.99	6.42	6.20	5.81	5.47	5.35	5.26	5.11	4.94	4.81	4.74	4.60	4.40	4.31
94	13.6	7.47	8.72	7.96	7.13	6.88	6.49	6.34	6.24	6.23	6.03	5.83	5.62	5.30	5.19	5.19
95	17.2	9.41	11.0	10.1	8.72	8.11	7.56	7.41	7.31	7.28	7.04	6.84	6.62	6.20	6.06	6.06
96	21.1	11.8	14.0	12.8	10.9	10.1	9.43	9.28	9.18	9.13	8.86	8.64	8.43	8.00	7.86	7.86
97	25.4	14.8	17.5	16.1	13.8	12.8	12.1	11.9	11.8	11.8	11.5	11.3	11.1	10.7	10.5	10.5
98	30.1	18.4	21.8	20.0	17.2	16.0	15.2	15.0	14.9	14.8	14.5	14.3	14.1	13.7	13.5	13.5
99	35.2	22.6	26.8	24.6	21.4	20.0	19.1	18.9	18.8	18.7	18.4	18.2	18.0	17.6	17.4	17.4
100	40.8	27.4	32.5	30.0	26.4	24.8	23.8	23.6	23.5	23.4	23.1	22.9	22.7	22.3	22.1	22.1
101	47.0	32.8	39.0	36.0	31.8	30.0	28.9	28.7	28.6	28.5	28.2	28.0	27.8	27.4	27.2	27.2
102	53.8	38.8	46.2	43.0	38.4	36.4	35.2	35.0	34.9	34.8	34.5	34.3	34.1	33.7	33.5	33.5
103	61.2	45.4	53.8	50.4	45.6	43.4	42.2	42.0	41.9	41.8	41.5	41.3	41.1	40.7	40.5	40.5
104	69.2	52.6	62.2	58.8	53.8	51.4	50.2	50.0	49.9	49.8	49.5	49.3	49.1	48.7	48.5	48.5
105	77.8	60.4	70.8	67.2	62.0	59.4	58.2	58.0	57.9	57.8	57.5	57.3	57.1	56.7	56.5	56.5
106	87.0	68.8	80.0	76.2	70.8	68.0	66.8	66.6	66.5	66.4	66.1	65.9	65.7	65.3	65.1	65.1
107	96.8	77.8	89.8	85.8	80.4	77.4	76.2	76.0	75.9	75.8	75.5	75.3	75.1	74.7	74.5	74.5
108	107.2	87.4	100.0	96.0	90.4	87.4	86.2	86.0	85.9	85.8	85.5	85.3	85.1	84.7	84.5	84.5
109	118.2	97.6	112.0	108.0	102.4	99.4	98.2	98.0	97.9	97.8	97.5	97.3	97.1	96.7	96.5	96.5
110	129.8	108.4	124.0	120.0	114.4	111.4	110.2	110.0	109.9	109.8	109.5	109.3	109.1	108.7	108.5	108.5
111	142.0	119.8	136.0	132.0	126.4	123.4	122.2	122.0	121.9	121.8	121.5	121.3	121.1	120.7	120.5	120.5
112	154.8	131.8	148.0	144.0	138.4	135.4	134.2	134.0	133.9	133.8	133.5	133.3	133.1	132.7	132.5	132.5
113	168.2	144.4	162.0	158.0	152.4	149.4	148.2	148.0	147.9	147.8	147.5	147.3	147.1	146.7	146.5	146.5
114	182.2	157.4	176.0	172.0	166.4	163.4	162.2	162.0	161.9	161.8	161.5	161.3	161.1	160.7	160.5	160.5
115	196.8	170.8	190.0	186.0	180.4	177.4	176.2	176.0	175.9	175.8	175.5	175.3	175.1	174.7	174.5	174.5
116	211.8	184.8	204.0	200.0	194.4	191.4	190.2	190.0	189.9	189.8	189.5	189.3	189.1	188.7	188.5	188.5
117	227.2	199.4	218.0	214.0	208.4	205.4	204.2	204.0	203.9	203.8	203.5	203.3	203.1	202.7	202.5	202.5
118	243.0	214.4	234.0	230.0	224.4	221.4	220.2	220.0	219.9	219.8	219.5	219.3	219.1	218.7	218.5	218.5
119	259.2	229.8	254.0	250.0	244.4	241.4	240.2	240.0	239.9	239.8	239.5	239.3	239.1	238.7	238.5	238.5
120	275.8	245.8	270.0	266.0	260.4	257.4	256.2	256.0	255.9	255.8	255.5	255.3	255.1	254.7	254.5	254.5
121	292.8	262.4	286.0	282.0	276.4	273.4	272.2	272.0	271.9	271.8	271.5	271.3	271.1	270.7	270.5	270.5
122	310.2	279.4	304.0	300.0	294.4	291.4	290.2	290.0	289.9	289.8	289.5	289.3	289.1	288.7	288.5	288.5
123	328.0	296.8	322.0	318.0	312.4	309.4	308.2	308.0	307.9	307.8	307.5	307.3	307.1	306.7	306.5	306.5
124	346.2	314.8	340.0	336.0	330.4	327.4	326.2	326.0	325.9	325.8	325.5	325.3	325.1	324.7	324.5	324.5
125	364.8	333.4	358.0	354.0	348.4	345.4	344.2	344.0	343.9	343.8	343.5	343.3	343.1	342.7	342.5	342.5
126	383.8	352.4	376.0	372.0	366.4	363.4	362.2	362.0	361.9	361.8	361.5	361.3	361.1	360.7	360.5	360.5
127	403.2	371.8	394.0	390.0	384.4	381.4	380.2	380.0	379.9	379.8	379.5	379.3	379.1	378.7	378.5	378.5
128	423.0	391.4	412.0	408.0	402.4	399.4	398.2	398.0	397.9	397.8	397.5	397.3	397.1	396.7	396.5	396.5
129	443.2	411.4	430.0	426.0	420.4	417.4	416.2	416.0	415.9	415.8	415.5	415.3	415.1	414.7	414.5	414.5
130	463.8	431.8	448.0	444.0	438.4	435.4	434.2	434.0	433.9	433.8	433.5	433.3	433.1	432.7	432.5	432.5
131	484.8	452.4	466.0	462.0	456.4	453.4	452.2	452.0	451.9	451.8	451.5	451.3	451.1	450.7	450.5	450.5
132	506.2	473.4	484.0	480.0	474.4	471.4	470.2	470.0	469.9	469.8	469.5	469.3	469.1	468.7	468.5	468.5
133	528.0	494.8	502.0	498.0	492.4	489.4	488.2	488.0	487.9	487.8	487.5	487.3	487.1	486.7	486.5	486.5
134	550.2	516.4	520.0	516.0	510.4	507.4	506.2	506.0	505.9	505.8	505.5	505.3	505.1	504.7	504.5	504.5
135	572.8	538.4	538.0	534.0	528.4	525.4	524.2	524.0	523.9	523.8	523.5	523.3	523.1	522.7	522.5	522.5
136	595.8	560.8	556.0	552.0	546.4	543.4	542.2	542.0	541.9	541.8	541.5	541.3	541.1	540.7	540.5	540.5
137	619.2	583.4	578.0	574.0	568.4	565.4	564.2	564.0	563.9	563.8	563.5	563.3	563.1	562.7	562.5	562.5
138	643.0	606.4	598.0	594.0	588.4	585.4	584.2	584.0	583.9	583.8	583.5	583.3	583.1	582.7	582.5	582.5
139	667.2	629.8	618.0	614.0	608.4	605.4	604.2	604.0	603.9	603.8	603.5	603.3	603.1	602.7	602.5	602.5
140	691.8	653.4	638.0	634.0	628.4	625.4	624.2	624.0	623.9	623.8	623.5	623.3	623.1	622.7	622.5	622.5
141	716.8	677.4	658.0	654.0	648.4	645.4	644.2	644.0	643.9	643.8	643.5	643.3	643.1	642.7	642.5	642.5
142	742.0	701.8	678.0	674.0	668.4	665.4	664.2	664.0	663.9	663.8	663.5	663.3	663.1	662.7	662.5	662.5
143	767.2	726.4	698.0	694.0	688.4	685.4	684.2	684.0	683.9	683.8	683.5	683.3	683.1	682.7	682.5	682.5
144	792.8	751.4	718.0	714.0	708.4	705.4	704.2	704.0	703.9	703.8	703.5	703.3	703.1	702.7	702.5	702.5
145	818.8	776.8	738.0	734.0	728.4	725.4	724.2	724.0	723.9	723.8	723.5	723.3	723.1	722.7	722.5	722.5
146	845.2	802.4	758.0	754.0	748.4	745.4	744.2	744.0	743.9	743.8	743.5	743.3	743.1	742.7	742.5	742.5
147	872.0	828.4	778.0	774.0	768.4	765.4	764.2	764.0	763.9	763.8	763.5	763.3	763.1	762.7	762.5	762.5
148	899.2	854.8	798.0	794.0	788.4	785.4	784.2	784.0	783.9	783.8	783.5	783.3	783.1	782.7	782.5	782.5
149	926.8	881.4	818.0	814.0	808.4	805.4	804.2	804.0	803.9	803.8	803.5	803.3	803.1	802.7	802.5	802.5
150	954.8	908.4	838.0	834.0	828.4	825.4	824.2	824.0	823.9	823.8	823.5	823.3	823.1	822.7	822.5	822.5
151	983.0	935.8	858.0	854.0	848.4	845.4	844.2	844.0	843.9	843.8	843.5	843.3	843.1	842.7	842.5	842.5
152	1011.2	963.4	878.0	874.0	868.4	865.4	864.2	864.0	863.9	863.8	863.5	863.3	863.1	862.7	862.5	862.5
153	1040.0	991.4	898.0	894.0	888.4	885.4	884.2	884.0	883.9	883.8	883.5	883.3	883.1	882.7	882.5	882.5
154	1069.2	1019.8	918.0	914.0	908.4	905.4	904.2	904.0	903.9	903.8	903.5	903.3	903.1	902.7	902.5	902.5
155	1098.8	1048.4	938.0	934.0	928.4	925.4	924.2	924.0	923.9	923.8	923.5	923.3	923.1	922.7	922.5	922.5
156	1128.8	1077.4	958.0	954.0	948.4	945.4	944.2	944.0	943.9	943.8	943.5	943.3	943.1	942.7	942.5	942.5
157	1159.2	1106.8	978.0	974.0	968.4	965.4	964.2	964.0	963.9	963.8	963.5	963.3	963.1	962.7	962.5	962.5
158	1190.0	1136.4	998.0	994.0	988.4	985.4	984.2	984.0	983.9	983.8	983.5	983.3	983.1	982.7	982.5	982.5
159	1221.2	1166.4	1018.0	1014.0	1008.4	1005.4	1004.2	1004.0	1003.9	1003.8	1003.5	1003.3	1003.1	1002.7	1002.5	1002.5
160	1252.8	1196.8	1038.0	1034.0	1028.4	1025.4	1024.2	1024.0	1023.9	1023.8	1023.5	1023.3	1023.1	1022.7	1022.5	1022.5
161	1284.8	1227.4	1058.0	1054.0	1048.4	1045.4	1044.2	1044.0	1043.9	1043.8	1043.5	1043.3	1043.1	1042.7	1042.5	1042.5
162	1317.2	1258.4	1078.0	1074.0	1068.4	1065.4	1064.2	1064.0	1063.9	1063.8	1063.5	1063.3	1063.1			

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