KEMENTERIAN PENDIDIKAN TINGGI
JABATAN PENDIDIKAN POLITEKNIK DAN KOLEJ KOMUNITI

BAHAGIAN PEPERIKSAAN DAN PENILAIAN
JABATAN PENDIDIKAN POLITEKNIK DAN KOLEJ KOMUNITI
KEMENTERIAN PENDIDIKAN TINGGI

JABATAN MATEMATIK, SAINS DAN KOMPUTER

PEPERIKSAAN AKHIR

SESI II : 2025/2026

DBM30263: STATISTICS AND PROBABILITY

TARIKH : 29 APRIL 2026
MASA : 8.30 PAGI – 10.30 PAGI (2 JAM)

Kertas ini mengandungi **LAPAN (8)** halaman bercetak.

Struktur (4 soalan)

Dokumen sokongan yang disertakan : Formula

JANGAN BUKA KERTAS SOALAN INI SEHINGGA DIARAHKAN

(CLO yang tertera hanya sebagai rujukan)

TERBUKA

INSTRUCTION:

This section consists of **FOUR (4)** structured questions. Answer **ALL** questions.

ARAHAN:

*Bahagian ini mengandungi **EMPAT (4)** soalan berstruktur. Jawab semua soalan.*

QUESTION 1

SOALAN 1

CLO1 (a) i. State **TWO (2)** differences between a discrete random variable and a continuous random variable.

*Nyatakan **DUA (2)** perbezaan antara pemboleh ubah rawak diskret dan pemboleh ubah rawak selanjar.*

[4 marks]

[*4 markah*]

ii. Give **ONE (1)** example each for a discrete random variable and a continuous random variable.

*Berikan **SATU (1)** contoh bagi setiap pemboleh ubah rawak diskret dan pemboleh ubah rawak selanjar.*

[2 marks]

[*2 markah*]

CLO1 (b) A random variable X represents the number of students who arrived late to a lecture in a particular week. The probability distribution of X is given in Table 1. Calculate:

Pemboleh ubah rawak X mewakili bilangan pelajar yang tiba lewat ke suatu kuliah dalam minggu tertentu. Taburan kebarangkalian bagi X diberikan dalam Jadual 1. Kira:

Table 1/ *Jadual 1*

x	0	1	2	3
$P(X = x)$	0.15	0.30	0.35	0.20

i. the mean of the distribution
min taburan tersebut

[3 marks]
[*3 markah*]

ii. the standard deviation of the distribution
sisihan piawai tersebut

[6 marks]
[*6 markah*]

CLO1 (c) i. A company wants to select 5 employees from a group of 7 technicians and 6 assistants. Calculate the number of possible selections if the group includes at most 2 assistants.
Sebuah syarikat ingin memilih 5 orang pekerja daripada sekumpulan 7 orang juruteknik dan 6 orang pembantu. Kirakan bilangan cara pemilihan yang mungkin jika kumpulan tersebut mengandungi tidak lebih daripada 2 orang pembantu.

[5 marks]
[*5 markah*]

ii. At a Polytechnic, Diploma in Information Technology students are required to pass a networking practical assessment. Each student has a 70% chance of passing the assessment. A random sample of 6 students is selected. Calculate the probability that more than 4 students pass the assessment.
Di sebuah Politeknik, pelajar Diploma Teknologi Maklumat dikehendaki lulus penilaian amali rangkaian. Setiap pelajar mempunyai kebarangkalian 70% untuk lulus penilaian tersebut. Satu sampel rawak yang terdiri daripada 6 orang pelajar dipilih. Kirakan kebarangkalian bahawa lebih daripada 4 orang pelajar lulus penilaian tersebut.

[5 marks]
[*5 markah*]

QUESTION 2

SOALAN 2

CLO1 (a) Calculate the probability for the standard normal distribution of the following:

Kirakan kebarangkalian bagi taburan normal piawai bagi perkara berikut:

i. $P(1.62 < z < 2.65)$

[4 marks]

[*4 markah*]

ii. $P(z > 0.97)$

[2 marks]

[*2 markah*]

iii. $P(-2.49 < z < -0.57)$

[4 marks]

[*4 markah*]

CLO1 (b) The IQ score of students is normally distributed with mean of 100 and standard deviation of 15. A particular test requires a minimum IQ score of 110.

Skor IQ pelajar mengikut taburan normal dengan min 100 dan sisihan piawai 15. Satu ujian tertentu memerlukan skor IQ minimum sebanyak 110.

i. Calculate the percentage of students who are eligible to sit for the particular test.

Kirakan peratusan pelajar yang layak untuk menduduki ujian tersebut.

[7 marks]

[*7 markah*]

ii. Determine the minimum and maximum IQ score that contains the middle 80% of students.

Tentukan skor IQ minimum dan maksimum yang merangkumi 80% pelajar di bahagian tengah taburan.

[8 marks]

[*8 markah*]

QUESTION 3

SOALAN 3

CLO1 (a) A software testing team examine the program execution of a program in a system. Each program execution has a probability of 0.7 of running successfully without errors. A random sample of 120 program executions has been tested.

Satu pasukan pengujian perisian memeriksa pelaksanaan program dalam sebuah sistem. Setiap pelaksanaan program mempunyai kebarangkalian 0.7 untuk berjalan dengan berjaya tanpa ralat. Satu sampel rawak sebanyak 120 pelaksanaan program telah diuji

i. Show that the binomial distribution of the number of successful program executions can be approximated using a normal distribution.

Buktikan bahawa taburan binomial bagi bilangan pelaksanaan program yang berjaya boleh dianggarkan menggunakan taburan normal.

[6 marks]

[*6 markah*]

ii. Calculate the mean and standard deviation of the approximating normal distribution.

Kirakan min dan sisihan piawai bagi taburan normal yang menghampiri taburan tersebut.

[4 marks]

[*4 markah]*

CLO1 (b) A network administrator monitors data packets sent through a server. Each data packet has a 95% probability of being transmitted successfully without errors. A random sample of 200 data packets is observed. Using the normal approximation to the binomial distribution, answer the following questions.

Seorang pentadbir rangkaian memantau paket data yang dihantar melalui sebuah pelayan. Setiap paket data mempunyai kebarangkalian 95% untuk berjaya dihantar tanpa ralat. Satu sampel rawak sebanyak 200 paket data diperhatikan. Dengan menggunakan penghampiran normal kepada taburan binomial, jawab soalan-soalan berikut.

i. Calculate the probability that at most 185 data packets are transmitted successfully.
Kirakan kebarangkalian bahawa paling banyak 185 paket data berjaya dihantar.

[7 marks]
[*7 markah*]

ii. Calculate the probability that exactly 192 data packets are transmitted successfully.
Kirakan kebarangkalian bahawa tepat 192 paket data berjaya dihantar.

[8 marks]
[*8 markah*]

QUESTION 4

SOALAN 4

CLO1 (a) Explain:

Terangkan:

i. **TWO (2)** types of sampling distribution.

DUA (2) *jenis taburan pensampelan.*

[2 marks]

[*2 markah*]

ii. the difference between point estimation and interval estimation.

Perbezaan antara anggaran titik dan anggaran selang.

[4 marks]

[*4 markah*]

CLO1 (b) i. A separate survey finds that 18 out of 120 Information Technology (IT) students practice coding regularly outside class hours. Calculate the point estimate of the population proportion of IT students who practice coding regularly.

Satu tinjauan berasingan mendapati bahawa 18 daripada 120 pelajar Teknologi Maklumat (IT) mengamalkan aktiviti pengaturcaraan secara berkala di luar waktu kelas. Kirakan anggaran titik bagi perkadaran populasi pelajar IT yang mengamalkan aktiviti pengaturcaraan secara berkala.

[2 marks]

[*2 markah*]

ii. The number of hours spent by 7 IT students in the coding lab for programming activities in a week are: 5.5, 6.2, 7.8, 6.9, 8.4, 7.1, 6.3. Calculate the point estimate of the standard deviation.
Bilangan jam yang dihabiskan oleh 7 pelajar IT dalam makmal pengaturcaraan untuk aktiviti coding dalam seminggu ialah: 5.5, 6.2, 7.8, 6.9, 8.4, 7.1, 6.3. Kirakan anggaran titik bagi sisihan piawai.

[7 marks]
[*7 markah*]

CLO1 (c) i. A survey found that 72 programming students spent an average of 12.6 hours per week debugging, with a sample standard deviation of 2.9 hours. Calculate the margin of error at a 99% confidence level.
Satu tinjauan mendapati bahawa 72 pelajar pengaturcaraan menghabiskan purata 12.6 jam seminggu untuk mengesan dan membetulkan ralat, dengan sisihan piawai sampel 2.9 jam. Kirakan margin ralat pada tahap keyakinan 99%.

[4 marks]
[*4 markah*]

ii. A survey is conducted to estimate the average time (in minutes) spent by developers reviewing code each week. A random sample of 44 developers had a sample mean of 45 minutes and a population standard deviation of 9 minutes. Calculate the 90% confidence interval for the average weekly code review time.
Satu tinjauan dijalankan untuk menganggar purata masa (dalam minit) yang dihabiskan oleh pembangun untuk menyemak kod setiap minggu. Satu sampel rawak daripada 44 pembangun mempunyai min sampel 45 minit dan sisihan piawai populasi 9 minit. Kirakan selang keyakinan 90% bagi purata masa mingguan menyemak kod.

[6 marks]
[*6 markah*]

SOALAN TAMAT

FORMULA SHEET FOR DBM30263: STATISTICS AND PROBABILITY

<table>
<tr><th colspan="4">PROBABILITY DISTRIBUTIONS</th></tr>
<tr><td>1</td><td>Mean of a Discrete Random Variable

$\mu = E(x) = \sum [x \cdot P(X = x)]$</td><td>6</td><td>Binomial Distributions

$P(X = x) = \frac{n!}{(n-x)!\,x!} \cdot p^x \cdot q^{n-x}$
Or
$P(X = x) = {}^nC_x \cdot p^x \cdot q^{n-x}$

Where;
$X \sim Bin(n, p)$
$q = 1 - p$</td></tr>
<tr><td>2</td><td>Variance of a Discrete Random Variable

$\sigma^2 = \sum [(x-\mu)^2 \cdot P(X = x)]$
Or
$\sigma^2 = \left[\sum x^2 . P(X = x)\right] - \mu^2$</td><td>7</td><td>Mean, Variance, and Standard Deviation of Binomial Distribution

Mean,$\mu = np$
Variance, $\sigma^2 = npq$
Standard Deviation, $\sigma = \sqrt{npq}$</td></tr>
<tr><td>3</td><td>Standard Deviation of a Discrete Random Variable

$\sigma = \sqrt{\sum [(x-\mu)^2 \cdot P(X = x)]}$
Or
$\sigma = \sqrt{\left[\sum x^2 . P(X = x)\right] - \mu^2}$</td><td>8</td><td>Poisson distribution

$P(X = x) = \frac{e^{-\lambda}\lambda^x}{x!}$</td></tr>
<tr><td>4</td><td>Factorial

$n! = n \times (n-1) \times \ldots 1$</td><td>9</td><td>Mean, Variance, and Standard Deviation of Poisson Distribution

Mean, $\mu = \lambda$
Variance, $\sigma^2 = \lambda$
Standard Deviation, $\sigma = \sqrt{\lambda}$</td></tr>
<tr><td>5</td><td>Combination

$C(n, r) = nC_r = \binom{n}{r} = \frac{n!}{(n-r)!\,r!}$</td><td>10</td><td>Standard Normal Distribution

$z = \frac{X - \mu}{\sigma}$

Where;
$X \sim N(\mu, \sigma^2)$</td></tr>
<tr><td>11</td><td colspan="3">Continuity Correction

(a) $P(X \geq a) = P(X > a - 0.5)$
(b) $P(X > a) = P(X > a + 0.5)$
(c) $P(X \leq a) = P(X < a + 0.5)$
(d) $P(X < a) = P(X < a - 0.5)$
(e) $P(a \leq X \leq b) = P(a - 0.5 < X < b + 0.5)$
(f) $P(a < X < b) = P(a + 0.5 < X < b - 0.5)$
(g) $P(X = a) = P(a - 0.5 < X < a + 0.5)$</td></tr>
</table>

SAMPLING AND ESTIMATION			
1	Population Mean, (μ) (Sample Mean): $\bar{x} = \frac{\Sigma x}{n}$	6	Critical t-value $t_{\alpha/2}$
2	Population Proportion ($\hat{p}$) (Sample Proportion): $\hat{p} = \frac{x}{n}$	7	Degree of Freedom $df = n - 1$
3	Population Standard Deviation (σ) (Sample Standard Deviation): $s = \sqrt{\frac{\sum(x_i - \bar{x})^2}{n-1}}$	8	Confidence Interval of a Population Mean for Large Samples $CI = \bar{x} \pm ME$ Where; $ME = z_{\alpha/2} \cdot \left(\frac{\sigma}{\sqrt{n}}\right)$
4	Standard Error of The Mean $SEM = \frac{\sigma}{\sqrt{n}}$	9	Confidence Interval of a Population Mean for Small Samples $CI = \bar{x} \pm ME$ Where; $ME = t_{\alpha/2} \cdot \left(\frac{s}{\sqrt{n}}\right)$
5	Critical z-value $z_{\alpha/2}$	10	Confidence Interval of a Population Proportion for Large Samples $CI = \hat{p} \pm ME$ Where; $ME = z_{\alpha/2} \cdot \sqrt{\frac{\hat{p}(1-\hat{p})}{n}}$

Standard Normal Probabilities

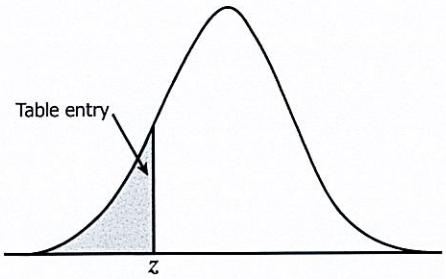

Table entry for z is the area under the standard normal curve to the left of z.

z	.00	.01	.02	.03	.04	.05	.06	.07	.08	.09
−3.4	.0003	.0003	.0003	.0003	.0003	.0003	.0003	.0003	.0003	.0002
−3.3	.0005	.0005	.0005	.0004	.0004	.0004	.0004	.0004	.0004	.0003
−3.2	.0007	.0007	.0006	.0006	.0006	.0006	.0006	.0005	.0005	.0005
−3.1	.0010	.0009	.0009	.0009	.0008	.0008	.0008	.0008	.0007	.0007
−3.0	.0013	.0013	.0013	.0012	.0012	.0011	.0011	.0011	.0010	.0010
−2.9	.0019	.0018	.0018	.0017	.0016	.0016	.0015	.0015	.0014	.0014
−2.8	.0026	.0025	.0024	.0023	.0023	.0022	.0021	.0021	.0020	.0019
−2.7	.0035	.0034	.0033	.0032	.0031	.0030	.0029	.0028	.0027	.0026
−2.6	.0047	.0045	.0044	.0043	.0041	.0040	.0039	.0038	.0037	.0036
−2.5	.0062	.0060	.0059	.0057	.0055	.0054	.0052	.0051	.0049	.0048
−2.4	.0082	.0080	.0078	.0075	.0073	.0071	.0069	.0068	.0066	.0064
−2.3	.0107	.0104	.0102	.0099	.0096	.0094	.0091	.0089	.0087	.0084
−2.2	.0139	.0136	.0132	.0129	.0125	.0122	.0119	.0116	.0113	.0110
−2.1	.0179	.0174	.0170	.0166	.0162	.0158	.0154	.0150	.0146	.0143
−2.0	.0228	.0222	.0217	.0212	.0207	.0202	.0197	.0192	.0188	.0183
−1.9	.0287	.0281	.0274	.0268	.0262	.0256	.0250	.0244	.0239	.0233
−1.8	.0359	.0351	.0344	.0336	.0329	.0322	.0314	.0307	.0301	.0294
−1.7	.0446	.0436	.0427	.0418	.0409	.0401	.0392	.0384	.0375	.0367
−1.6	.0548	.0537	.0526	.0516	.0505	.0495	.0485	.0475	.0465	.0455
−1.5	.0668	.0655	.0643	.0630	.0618	.0606	.0594	.0582	.0571	.0559
−1.4	.0808	.0793	.0778	.0764	.0749	.0735	.0721	.0708	.0694	.0681
−1.3	.0968	.0951	.0934	.0918	.0901	.0885	.0869	.0853	.0838	.0823
−1.2	.1151	.1131	.1112	.1093	.1075	.1056	.1038	.1020	.1003	.0985
−1.1	.1357	.1335	.1314	.1292	.1271	.1251	.1230	.1210	.1190	.1170
−1.0	.1587	.1562	.1539	.1515	.1492	.1469	.1446	.1423	.1401	.1379
−0.9	.1841	.1814	.1788	.1762	.1736	.1711	.1685	.1660	.1635	.1611
−0.8	.2119	.2090	.2061	.2033	.2005	.1977	.1949	.1922	.1894	.1867
−0.7	.2420	.2389	.2358	.2327	.2296	.2266	.2236	.2206	.2177	.2148
−0.6	.2743	.2709	.2676	.2643	.2611	.2578	.2546	.2514	.2483	.2451
−0.5	.3085	.3050	.3015	.2981	.2946	.2912	.2877	.2843	.2810	.2776
−0.4	.3446	.3409	.3372	.3336	.3300	.3264	.3228	.3192	.3156	.3121
−0.3	.3821	.3783	.3745	.3707	.3669	.3632	.3594	.3557	.3520	.3483
−0.2	.4207	.4168	.4129	.4090	.4052	.4013	.3974	.3936	.3897	.3859
−0.1	.4602	.4562	.4522	.4483	.4443	.4404	.4364	.4325	.4286	.4247
−0.0	.5000	.4960	.4920	.4880	.4840	.4801	.4761	.4721	.4681	.4641

Standard Normal Probabilities

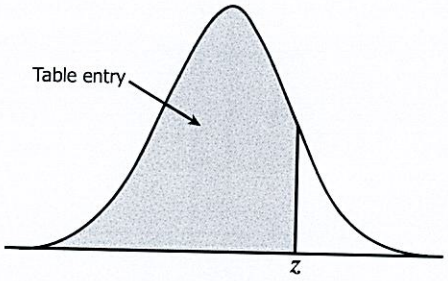

Table entry for z is the area under the standard normal curve to the left of z.

z	.00	.01	.02	.03	.04	.05	.06	.07	.08	.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	.9990	.9991	.9991	.9991	.9992	.9992	.9992	.9992	.9993	.9993
3.2	.9993	.9993	.9994	.9994	.9994	.9994	.9994	.9995	.9995	.9995
3.3	.9995	.9995	.9995	.9996	.9996	.9996	.9996	.9996	.9996	.9997
3.4	.9997	.9997	.9997	.9997	.9997	.9997	.9997	.9997	.9997	.9998

t Table

cum. prob	$t_{.50}$	$t_{.75}$	$t_{.80}$	$t_{.85}$	$t_{.90}$	$t_{.95}$	$t_{.975}$	$t_{.99}$	$t_{.995}$	$t_{.999}$	$t_{.9995}$
one-tail	0.50	0.25	0.20	0.15	0.10	0.05	0.025	0.01	0.005	0.001	0.0005
two-tails	1.00	0.50	0.40	0.30	0.20	0.10	0.05	0.02	0.01	0.002	0.001
df											
1	0.000	1.000	1.376	1.963	3.078	6.314	12.71	31.82	63.66	318.31	636.62
2	0.000	0.816	1.061	1.386	1.886	2.920	4.303	6.965	9.925	22.327	31.599
3	0.000	0.765	0.978	1.250	1.638	2.353	3.182	4.541	5.841	10.215	12.924
4	0.000	0.741	0.941	1.190	1.533	2.132	2.776	3.747	4.604	7.173	8.610
5	0.000	0.727	0.920	1.156	1.476	2.015	2.571	3.365	4.032	5.893	6.869
6	0.000	0.718	0.906	1.134	1.440	1.943	2.447	3.143	3.707	5.208	5.959
7	0.000	0.711	0.896	1.119	1.415	1.895	2.365	2.998	3.499	4.785	5.408
8	0.000	0.706	0.889	1.108	1.397	1.860	2.306	2.896	3.355	4.501	5.041
9	0.000	0.703	0.883	1.100	1.383	1.833	2.262	2.821	3.250	4.297	4.781
10	0.000	0.700	0.879	1.093	1.372	1.812	2.228	2.764	3.169	4.144	4.587
11	0.000	0.697	0.876	1.088	1.363	1.796	2.201	2.718	3.106	4.025	4.437
12	0.000	0.695	0.873	1.083	1.356	1.782	2.179	2.681	3.055	3.930	4.318
13	0.000	0.694	0.870	1.079	1.350	1.771	2.160	2.650	3.012	3.852	4.221
14	0.000	0.692	0.868	1.076	1.345	1.761	2.145	2.624	2.977	3.787	4.140
15	0.000	0.691	0.866	1.074	1.341	1.753	2.131	2.602	2.947	3.733	4.073
16	0.000	0.690	0.865	1.071	1.337	1.746	2.120	2.583	2.921	3.686	4.015
17	0.000	0.689	0.863	1.069	1.333	1.740	2.110	2.567	2.898	3.646	3.965
18	0.000	0.688	0.862	1.067	1.330	1.734	2.101	2.552	2.878	3.610	3.922
19	0.000	0.688	0.861	1.066	1.328	1.729	2.093	2.539	2.861	3.579	3.883
20	0.000	0.687	0.860	1.064	1.325	1.725	2.086	2.528	2.845	3.552	3.850
21	0.000	0.686	0.859	1.063	1.323	1.721	2.080	2.518	2.831	3.527	3.819
22	0.000	0.686	0.858	1.061	1.321	1.717	2.074	2.508	2.819	3.505	3.792
23	0.000	0.685	0.858	1.060	1.319	1.714	2.069	2.500	2.807	3.485	3.768
24	0.000	0.685	0.857	1.059	1.318	1.711	2.064	2.492	2.797	3.467	3.745
25	0.000	0.684	0.856	1.058	1.316	1.708	2.060	2.485	2.787	3.450	3.725
26	0.000	0.684	0.856	1.058	1.315	1.706	2.056	2.479	2.779	3.435	3.707
27	0.000	0.684	0.855	1.057	1.314	1.703	2.052	2.473	2.771	3.421	3.690
28	0.000	0.683	0.855	1.056	1.313	1.701	2.048	2.467	2.763	3.408	3.674
29	0.000	0.683	0.854	1.055	1.311	1.699	2.045	2.462	2.756	3.396	3.659
30	0.000	0.683	0.854	1.055	1.310	1.697	2.042	2.457	2.750	3.385	3.646
40	0.000	0.681	0.851	1.050	1.303	1.684	2.021	2.423	2.704	3.307	3.551
60	0.000	0.679	0.848	1.045	1.296	1.671	2.000	2.390	2.660	3.232	3.460
80	0.000	0.678	0.846	1.043	1.292	1.664	1.990	2.374	2.639	3.195	3.416
100	0.000	0.677	0.845	1.042	1.290	1.660	1.984	2.364	2.626	3.174	3.390
1000	0.000	0.675	0.842	1.037	1.282	1.646	1.962	2.330	2.581	3.098	3.300
z	0.000	0.674	0.842	1.036	1.282	1.645	1.960	2.326	2.576	3.090	3.291
	0%	50%	60%	70%	80%	90%	95%	98%	99%	99.8%	99.9%
	Confidence Level										