	Department of Statistics and Operations Research **College of Science, KingSaudUniversity** **Final Exam, Second Semester** **STAT 324** **1436 – 1437 H**

Student Name	
Student ID	
Group No.	
Attendance No.	
Dr.	

- Time allowed is 3 hours.
- This exam contains 40 Multiple Choice questions.
- Answer all questions and choose the nearest number to your answer.
- Do not copy answers from your neighbors. They have different question forms.
- Mobile Telephones are not allowed in the classrooms.
- For each question, put the code of the correct answer in the next table beneath the question number.

1	2	3	4	5	6	7	8	9	10
D	**A**	**A**	**C**	**C**	**D**	**A**	**B**	**A**	**D**

11	12	13	14	15	16	17	18	19	20
C	**B**	**A**	**C**	**B**	**A**	**D**	**C**	**C**	**B**

21	22	23	24	25	26	27	28	29	30
A	**B**	**A**	**B**	**D**	**A**	**A**	**B**	**A**	**D**

31	32	33	34	35	36	37	38	39	40
A	**B**	**C**	**B**	**D**	**A**	**A**	**A**	**D**	**A**

Total Degree:	

ANSWER THE FOLLOWING QUESTIONS:

Question 1.

Suppose that a random sample of size100 is taken from a population having a proportion of the smokers $P_1 = 0.7$. Another independent sample of size 400 is taken from another population having a proportion of the smokers $P_2 = 0.4$. Let $\hat{p}_1$ and $\hat{p}_2$ be the proportions of the smokers in the first and the second samples, respectively:

[1].	The samplingdistribution for $\hat{p}_1$ has a standard error is:							
	(A)	0.00216	(B)	0.03217	(C)	0.73214	(D)	**0.0458**
[2].	The probability that $\hat{p}_1$ is at least 0.72 is:							
	(A)	**0.33**	(B)	0.67	(C)	0.74	(D)	0.56
[3].	The value of E($\hat{p}_1 - \hat{p}_2$) [$\mu_{\hat{p}_1 - \hat{p}_2}$] is:							
	(A)	**0.3**	(B)	1.3	(C)	0	(D)	0.8
[4].	The samplingdistribution for $\hat{p}_1 - \hat{p}_2$ has a standard error equals**:**							
	(A)	0.015	(B)	0.0022	(C)	**0.052**	(D)	0.1239
[5].	The probability that $\hat{p}_1 - \hat{p}_2$ is at most 0.2 is:							
	(A)	0.4423	(B)	0.983	(C)	**0.0274**	(D)	0.2415

Question 2.

Suppose that a random sample of size $n_1 = 16$ is taken from a normal population with a mean $\mu_1 = 2.5$ and a standard deviation $\sigma_1 = 2$. A second independent random sample of size $n_2 = 25$ is taken from another normal population with a mean $\mu_2 = 3.6$ and a standard deviation $\sigma_2 = 2.5$. Let $\overline{X}_1$ and $\overline{X}_2$ be the means of the first and second samples, respectively [we use $X \sim N(\mu, \sigma)$].

[6].	The mean of $\overline{X}_1$ [$\mu_{\overline{X}_1}$] is:							
	(A)	0.5	(B)	2	(C)	16	(D)	**2.5**
[7].	The varianceof $\overline{X}_1$ **[** $\sigma^2_{\overline{X}_1}$ **]** is:							
	(A)	**0.25**	(B)	0.50	(C)	0.75	(D)	4
[8].	The samplingdistribution of $\overline{X}_1$ is:							
	(A)	N(0,1)	**(B)**	**N(2.5, 0.5)**	(C)	N(2.5, 4)	(D)	t(15)
[9].	The probability $P(\overline{X}_1 > 2)$ is:							
	(A)	**0.8413**	(B)	0.9406	(C)	0.5401	(D)	0.2401
[10].	The mean of $\overline{X}_2 - \overline{X}_1$ [$\mu_{\overline{X}_2 - \overline{X}_1}$] is:							
	(A)	6.1	(B)	-1.1	(C)	-6.1	(D)	**1.1**
[11].	The variance of $\left(\overline{X}_2 - \overline{X}_1\right)\left[\sigma^2_{\overline{X}_2 - \overline{X}_1}\right]$ is:							
	(A)	4.5	(B)	10.25	(C)	**0. 5**	(D)	2.25
[12].	The samplingdistribution of $\overline{X}_2 - \overline{X}_1$ is:							
	(A)	N(0,1)	(B)	**N(1.1,** $\sqrt{0.5}$ **)**	(C)	N(-1.1,10.25)	(D)	t(39)
[13].	The probabilitythat $\overline{X}_2$ is greater than $\overline{X}_1$ by at least 1.5 is:							
	(A)	**0.2843**	(B)	0.9452	(C)	0.8643	(D)	0.6214

Question 3.

We consider a sample of 40 packets of biscuits from a productionof so many units which has the true mean packet weight μ where the population standard deviation $\sigma = 0.9\ g$. The average weight obtained for this sample is equal to $\overline{X} = 350\, g$, then:

[14].	The point estimate for population mean μ is:			
	(A)	40	(B)	0.81
	(C)	**350**	(D	0.9
[15].	The standard error of sample mean $(\sigma_{\overline{X}})$ is:			
	(A)	0.023	(B)	**0.142**
	(C)	0.81	(D	350
[16].	The upper limit of the 90% confidence interval for μ is:			
	(A)	**350.23**	(B)	358.48
	(C)	336.373	(D	351.34
[17].	The lower limit of the 90% confidence interval for μ is:			
	(A)	348.12	(B)	251.62
	(C)	335.627	(D	**349.77**
[18].	If we want to be 90% confident that the estimation error will not exceed e=0.1 when we use $\overline{X}$ to estimate μ, then the sample size n is:			
	(A)	110	(B)	275
	(C)	**220**	(D	138
To test at level 0.05 the claim that μ is greater than 349.7 i.e ($H_0: \mu = 349.7\ vs\ H_1: \mu > 349.7$):				
[19].	The value of the test statisticis:			
	(A)	z=0.33	(B)	t=2.108
	(C)	**z=2.11**	(D	t=2.44
[20].	The rejection region of H_0 (R.R. ofH_0) is:			
	(A)	(-1.96 , 1.96)	(B)	**(1.645, ∞)**
	(C)	(2.3646, ∞)	(D	($-\infty$, -1.96)
[21].	The decision is:			
	(A)	**Accept the claim**	(B)	Reject the claim
	(C)	No decision is possible	(D	None of them

Question 4.

Tubes are built by two manufacturing processes A and B. Two samples of tubes were drawn and the measures of diameters (in mm) are shown in the following table:

Tube	1	2	3	4	5	$\overline{X}$	S^2
ProcessA	63.1	63.5	62.8	64.3	63.76	63.516	0.6843
Process B	62.5	63.2	62.3	62.2		62.568	0.5498

It is assumed that the diameters of the tubes are distributed according to normal laws with unknown but equal variances.

[22].	The pooled estimate of the variance is:			
	(A)	0.5843	(B)	**0.6267**
	(C)	0.6171	(D	0.5498
[23].	The point estimate of standard error of $\overline{X}_1-\overline{X}_2\,(S_{\overline{X}_1-\overline{X}_2})$ is:			
	(A)	**0.531**	(B)	0.6267
	(C)	0.327	(D	0.274
[24].	The 95% confidence interval for the difference $\mu_1-\mu_2$ is:			
	(A)	(-0.213 , 1.112)	(B)	**(-0.308, 2.204)**
	(C)	(-0.11 , 1.82)	(D	(-0.093, 1.989)
To test at level of significance 0.05 if $H_0:\mu_1=\mu_2$ vs $H_1:\mu_1\neq\mu_2$:				
[25].	The value of the test statistic is:			
	(A)	2.3646	(B)	1.96
	(C)	1.645	(D)	**1.785**
[26].	The acceptance region of H_0 (A.R. ofH_0) is:			
	(A)	**(-2.365 , 2.365)**	(B)	(-1.96 , 1.96)
	(C)	$(2.365,\infty)$	(D	$(-\infty$, -2.365)
[27].	The decision is:			
	(A)	**Accept** H_0	(B)	Reject H_0
	(C)	No decision is possible	(D	None of them

Questions 5.

Students may choose between a 4-semester hour course with labs and a 3-semester hour course on physics without labs. The final examination is the same for each section. If 49 students in the section with labs made an average grade of 70 while 64 students in the section without labs made an average grade of 65. Assuming that the two populations have standard deviations 5 and 6, respectively. Then:

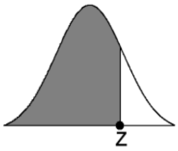
[28].	The point estimate of the difference between the true grade means ($\mu_1-\mu_2$) is:							
	(A)	4	(B)	**5**	(C)	6	(D)	7
[29].	The lower bound of the 95% confidence interval for the difference between the true grade means ($\mu_1-\mu_2$) is equal to:							
	(A)	**2.97**	(B)	7.65	(C)	2.05	(D)	7.02
To test at level 0.05 if $H_0:\mu_1=\mu_2$ vs $H_1:\mu_1>\mu_2$:								
[30].	The value of the test statistic is:							
	(A)	1.5214	(B)	6.2781	(C)	3.1248	(D)	**4.8276**
[31].	The Rejection region of H_0 (R.R.of H_0) is:							
	(A)	**(1.645,** ∞**)**	(B)	(-1.645, ∞)	(C)	(-1.96, 1.96)	(D)	(-∞, 1.96)
[32].	The decision is:							
	(A)	Accept H_0	(B)	**Reject** H_0	(C)	No decision is	(D)	None of them

Questions 6.

A food company distributes its brand of milk (HAPPY COW) in two cities (A) and (B). A random sample of 200 consumers from the first city (A) showed that 80 consumers prefer HAPPY COW brand. Another independent random sample of 300 consumers from the second city (B) showed that 90 consumers prefer HAPPY COW brand. Let P_A be the true proportion of consumers in the first city (A) preferring HAPPY COW brand and P_B be the true proportion of consumers in the second city (B) preferring HAPPY COW brand.

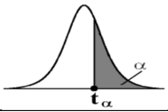
[33].	A 99% confidence interval for the true proportion of consumers preferring HAPPY COW brand in city (A) is:							
	(A)	$0.328 \le P_A \le 0.375$			(B)	$0.228 \le P_A \le 0.675$		
	(C)	$0.311 \le P_A \le 0.489$			(D)	$0.518 \le P_A \le 0.875$		
[34].	The upper limit of 99% confidence interval for $P_A - P_B$ is:							
	(A)	2.315			(B)	**0.212**		
	(C)	4.216			(D)	0.521		
[35].	The lower limit of 99% confidence interval for $P_A - P_B$ is:							
	(A)	1.234			(B)	-0.627		
	(C)	5.247			(D)	**- 0.012**		
At a 0.05 level of significance to test H_0: $P_A = 0.33$ against H_1: $P_A \ne 0.33$:								
[36].	The value of the test statistic is:							
	(A)	**2.11**	(B)	4.27	(C)	3.62	(D)	1.73
[37].	The decision is:							
	(A)	**Reject** H_0			(B)	Accept H_0		
	(C)	No decision is possible			(D)	None of them		
At a 0.05 level of significance to test H_0: $P_A = P_B$ against H_1: $P_A > P_B$:								
[38].	The pooled estimate of theproportion is:							
	(A)	**0.34**	(B)	0.35	(C)	0.40	(D)	0.30
[39].	The value of the test statistic is:							
	(A)	1.74	(B)	3.21	(C)	- 4.36	(D)	**2.31**
[40].	The decision is:							
	(A)	**Reject** H_0			(B)	Accept H_0		
	(C)	No decision is possible			(D)	None of them		

Areas under the Standard Normal Curve



Z	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
-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	0.0228	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	0.1922	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
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

Percentage Points of the *t* Distribution; $t_{\nu,\alpha}$ $\{P(T > t_{\nu,\alpha}) = \alpha\}$



ν	α													
	0.40	**0.30**	**0.20**	**0.15**	**0.10**	**0.05**	**0.025**	**0.02**	**0.015**	**0.01**	**0.0075**	**0.005**	**0.0025**	**0.0005**
1	0.325	0.727	1.376	1.963	3.078	6.314	12.706	15.895	21.205	31.821	42.434	63.657	127.322	636.590
2	0.289	0.617	1.061	1.386	1.886	2.920	4.303	4.849	5.643	6.965	8.073	9.925	14.089	31.598
3	0.277	0.584	0.978	1.250	1.638	2.353	3.182	3.482	3.896	4.541	5.047	5.841	7.453	12.924
4	0.271	0.569	0.941	1.190	1.533	2.132	2.776	2.999	3.298	3.747	4.088	4.604	5.598	8.610
5	0.267	0.559	0.920	1.156	1.476	2.015	2.571	2.757	3.003	3.365	3.634	4.032	4.773	6.869
6	0.265	0.553	0.906	1.134	1.440	1.943	2.447	2.612	2.829	3.143	3.372	3.707	4.317	5.959
7	0.263	0.549	0.896	1.119	1.415	1.895	2.365	2.517	2.715	2.998	3.203	3.499	4.029	5.408
8	0.262	0.546	0.889	1.108	1.397	1.860	2.306	2.449	2.634	2.896	3.085	3.355	3.833	5.041
9	0.261	0.543	0.883	1.100	1.383	1.833	2.262	2.398	2.574	2.821	2.998	3.250	3.690	4.781
10	0.260	0.542	0.879	1.093	1.372	1.812	2.228	2.359	2.527	2.764	2.932	3.169	3.581	4.587
11	0.260	0.540	0.876	1.088	1.363	1.796	2.201	2.328	2.491	2.718	2.879	3.106	3.497	4.437
12	0.259	0.539	0.873	1.083	1.356	1.782	2.179	2.303	2.461	2.681	2.836	3.055	3.428	4.318
13	0.259	0.538	0.870	1.079	1.350	1.771	2.160	2.282	2.436	2.650	2.801	3.012	3.372	4.221
14	0.258	0.537	0.868	1.076	1.345	1.761	2.145	2.264	2.415	2.624	2.771	2.977	3.326	4.140
15	0.258	0.536	0.866	1.074	1.341	1.753	2.131	2.249	2.397	2.602	2.746	2.947	3.286	4.073
16	0.258	0.535	0.865	1.071	1.337	1.746	2.120	2.235	2.382	2.583	2.724	2.921	3.252	4.015
17	0.257	0.534	0.863	1.069	1.333	1.740	2.110	2.224	2.368	2.567	2.706	2.898	3.222	3.965
18	0.257	0.534	0.862	1.067	1.330	1.734	2.101	2.214	2.356	2.552	2.689	2.878	3.197	3.922
19	0.257	0.533	0.861	1.066	1.328	1.729	2.093	2.205	2.346	2.539	2.674	2.861	3.174	3.883
20	0.257	0.533	0.860	1.064	1.325	1.725	2.086	2.197	2.336	2.528	2.661	2.845	3.153	3.850
21	0.257	0.532	0.859	1.063	1.323	1.721	2.080	2.189	2.328	2.518	2.649	2.831	3.135	3.819
22	0.256	0.532	0.858	1.061	1.321	1.717	2.074	2.183	2.320	2.508	2.639	2.819	3.119	3.792
23	0.256	0.532	0.858	1.060	1.319	1.714	2.069	2.177	2.313	2.500	2.629	2.807	3.104	3.768
24	0.256	0.531	0.857	1.059	1.318	1.711	2.064	2.172	2.307	2.492	2.620	2.797	3.091	3.745
25	0.256	0.531	0.856	1.058	1.316	1.708	2.060	2.167	2.301	2.485	2.612	2.787	3.078	3.725
26	0.256	0.531	0.856	1.058	1.315	1.706	2.056	2.162	2.296	2.479	2.605	2.779	3.067	3.707
27	0.256	0.531	0.855	1.057	1.314	1.703	2.052	2.158	2.291	2.473	2.598	2.771	3.057	3.690
28	0.256	0.530	0.855	1.056	1.313	1.701	2.048	2.154	2.286	2.467	2.592	2.763	3.047	3.674
29	0.256	0.530	0.854	1.055	1.311	1.699	2.045	2.150	2.282	2.462	2.586	2.756	3.038	3.659
30	0.256	0.530	0.854	1.055	1.310	1.697	2.042	2.147	2.278	2.457	2.581	2.750	3.030	3.646
40	0.255	0.529	0.851	1.050	1.303	1.684	2.021	2.123	2.250	2.423	2.542	2.704	2.971	3.551
60	0.254	0.527	0.848	1.045	1.296	1.671	2.000	2.099	2.223	2.390	2.504	2.660	2.915	3.460
120	0.254	0.526	0.845	1.041	1.289	1.658	1.980	2.076	2.196	2.358	2.468	2.617	2.860	3.373
∞	0.253	0.524	0.842	1.036	1.282	1.645	1.960	2.054	2.170	2.326	2.432	2.576	2.807	3.291