



UNIVERSITY EXAMINATIONS

**EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF SCIENCE IN
HUMAN NUTRITION AND DIETETICS**

HNDS 481: STATISTICAL DATA ANALYSIS**STREAMS: BSC HNDS****TIME: 2 HOURS****DAY/DATE: WEDNESDAY 18/12/2024****8.30 A.M – 10.30 A.M****INSTRUCTIONS:**

- Answer **ALL** questions
- Do not write anything on the question paper
- **No** use of mobile phones or any other unauthorized materials
- Write your answers legibly and **use your time wisely**

SECTION A: MULTIPLE CHOICE QUESTIONS [ONE MARK EACH] [30 MARKS]

1. Which of the following software is commonly used in nutrition research for statistical data analysis?
 - a) Microsoft Word
 - b) Adobe Photoshop
 - c) SPSS
 - d) VLC

2. Which measure of central tendency is most affected by extreme values?
 - a) Mean
 - b) Median
 - c) Mode
 - d) Standard deviation

3. What is the purpose of calculating the standard deviation?
 - a) To find the mean
 - b) To identify the most common value
 - c) To measure the spread of data around the mean
 - d) To find the range

4. A correlation coefficient (r) of 0.8 between two variables indicates:
 - a) A weak positive correlation
 - b) A strong positive correlation
 - c) A weak negative correlation

- d) No correlation
5. In a positively skewed distribution, the order of mean, median, and mode is typically:
- a) Mean > Median > Mode
 - b) Median > Mode > Mean
 - c) Mode > Median > Mean
 - d) Mean < Median < Mode
6. What is a normal distribution?
- a) The term used for positively skewed data
 - b) A normal distribution describes a curve that is very 'peaked' when the data are presented graphically
 - c) Describes data that are evenly distributed on either side of the mean score
 - d) When the data have too much variation and the resulting curve is 'flat'
7. A histogram is best used for which type of data?
- a) Qualitative data
 - b) Categorical data
 - c) Continuous data
 - d) Nominal data
8. Which type of data file is commonly used in SPSS for nutrition data analysis?
- a) .sav
 - b) .pdf
 - c) .mp4
 - d) .jpg
9. In SPSS, which menu option would you select to calculate the mean intake of protein across different groups?
- a) Analyze > Descriptive Statistics > Descriptives
 - b) File > Open
 - c) Graphs > Legacy Dialogs > Scatter
 - d) Transform > Compute Variable
10. To explore the relationship between age and calcium intake, which SPSS function would be most appropriate?
- a) Frequencies
 - b) Correlation
 - c) Independent Samples T-Test
 - d) Crosstabs
11. Which SPSS chart type is best for showing the distribution of calorie intake in a sample?
- a) Bar chart
 - b) Scatter plot
 - c) Histogram
 - d) Pie chart

12. In SPSS, which function would you use to compare the average nutrient intake between males and females?
 - a) Crosstabs
 - b) Chi-square Test
 - c) Independent-Samples T Test
 - d) Data Reduction

13. Which of the following is NOT a measure of variation?
 - a) Range
 - b) Mode
 - c) Variance
 - d) Standard deviation

14. In SPSS, what does the "Transform" function allow you to do with nutrition data?
 - a) Print a report
 - b) Save the data
 - c) Modify or calculate new variables
 - d) Open a new dataset

15. Which statistical test in SPSS would you use to determine if there is a significant difference in mean fiber intake across three dietary groups?
 - a) Correlation
 - b) ANOVA
 - c) Crosstabs
 - d) Linear Regression

16. If you want to visualize the relationship between fat intake and cholesterol levels, which graph type would be most appropriate?
 - a) Bar chart
 - b) Scatter plot
 - c) Pie chart
 - d) Box plot

17. Which of the following is an example of qualitative data in nutrition research?
 - a) Age
 - b) Body Mass Index (BMI)
 - c) Dietary preferences (e.g., vegetarian, vegan)
 - d) Caloric intake

18. The most suitable method for collecting dietary intake data over a 24-hour period is:
 - a) Food diary
 - b) Focus group
 - c) Questionnaire
 - d) 24-hour recall

19. A bar chart is best used to display:
 - a) Continuous data

- b) Categorical data
 - c) Averages over time
 - d) Correlation between two variables
20. If our data use an attitude scale, what type of variable measure should we select?
- a) Scale
 - b) Both scale and nominal
 - c) Nominal
 - d) Ordinal
21. Which chart type would be ideal to show the proportion of different macronutrients (carbohydrates, fats, proteins) in a daily diet?
- a) Line chart
 - b) Scatter plot
 - c) Pie chart
 - d) Histogram
22. In SPSS, what type of file is used to store output results?
- a) .sav
 - b) .doc
 - c) .xls
 - d) .spv
23. What is the function of the “Variable View” tab in SPSS?
- a) To display data values
 - b) To define variables and set their properties
 - c) To perform calculations
 - d) To create charts
24. In SPSS, the p-p plot is used to assess:
- a) Data entry errors
 - b) The normality of a dataset
 - c) Missing data
 - d) The sample size
25. Which of the following can be considered a non-parametric test in SPSS?
- a) T-test
 - b) ANOVA
 - c) Mann-Whitney U Test
 - d) Linear Regression
26. For a one sample t-test with sample size 58, the degrees of freedom is:
- a) 55
 - b) 56
 - c) 57
 - d) 58
27. Box plots in SPSS are primarily used to:

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- a) Show the relationship between two variables
 - b) Display the spread of data, including medians and outliers
 - c) Show trends over time
 - d) Display frequencies of categorical data
28. Which of the following software is commonly used for nutrition analysis and diet planning?
- a) Microsoft Excel
 - b) NutriSurvey
 - c) VLC
 - d) Adobe Photoshop
29. Which statistical test in SPSS is used to determine if there is a significant association between two categorical variables, such as diet type (vegetarian vs. non-vegetarian) and incidence of diabetes?
- a) Pearson Correlation
 - b) Spearman Correlation
 - c) Chi-square Test
 - d) Independent-Samples T Test
30. In a nutrition study, a correlation coefficient of 0.7 was found between sugar intake and body weight. This means:
- a) Increasing sugar intake causes weight gain
 - b) Higher sugar intake is associated with higher body weight
 - c) Sugar intake and body weight are not related
 - d) Sugar intake has no effect on body weight

SECTION B:

[25 MARKS]

1. The following SPSS output shows the results of an independent-samples t-test comparing calorie intake between males and females:

Group	N	Mean Calorie Intake	Std. Deviation
Male	50	2500	400
Female	50	2100	350

t	df	Sig. (2-tailed)
4.2	98	0.000

Explain the findings.

[4 marks]

2. A set of values representing vitamin C intake (in mg) for five days is given: 30, 35, 40, 45, 50. Compute the geometric mean of these values. [4 marks]
3. The following SPSS output shows ANOVA results for protein intake across three age groups:

Source	Sum of Squares	df	Mean Square	F	Sig.

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Between Groups	1500	2	750	5.8	0.005
Within Groups	20000	97	206		

Interpret the findings and explain if there a significant difference in protein intake among the three age groups [4 marks]

4. In a population with a normally distributed daily fiber intake (mean = 25 grams, standard deviation = 5 grams), what percentage of individuals consume more than 30 grams of fiber per day? (Use Z-scores and the standard normal distribution table). [4 marks]
5. A sample of 30 people has an average protein intake of 75 grams with a standard deviation of 10 grams. Calculate the 95% confidence interval for the mean protein intake. [4 marks]
6. The calorie intake (kcal) of 15 individuals is as follows: 1800, 2000, 2100, 1900, 2200, 2300, 1800, 2100, 1900, 2200, 2400, 2000, 2100, 2500, 1900. Organize these values into a frequency distribution table with intervals of 200 kcal and calculate the mean caloric intake. [5 marks]

SECTION C: [15 MARKS]

1. Given the following paired data on age and vitamin D levels, calculate the correlation coefficient: [10 marks]

Age (years)	Vitamin D Level (ng/mL)
25	30
30	28
35	25
40	20
45	18

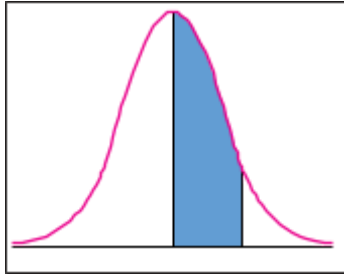
2. A sample of daily fat intake values (in grams) is given as follows: 60, 65, 70, 75, 80. Calculate the standard error of the mean. [5 marks]

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Chi-Square (χ^2) Distribution

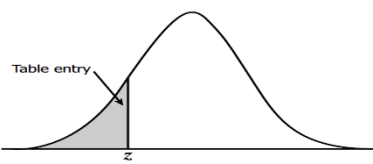
Area to the Right of Critical Value

Degrees of Freedom	Area to the Right of Critical Value									
	0.995	0.99	0.975	0.95	0.90	0.10	0.05	0.025	0.01	0.005
1	—	—	0.001	0.004	0.016	2.706	3.841	5.024	6.635	7.879
2	0.010	0.020	0.051	0.103	0.211	4.605	5.991	7.378	9.210	10.597
3	0.072	0.115	0.216	0.352	0.584	6.251	7.815	9.348	11.345	12.838
4	0.207	0.297	0.484	0.711	1.064	7.779	9.488	11.143	13.277	14.860
5	0.412	0.554	0.831	1.145	1.610	9.236	11.071	12.833	15.086	16.750
6	0.676	0.872	1.237	1.635	2.204	10.645	12.592	14.449	16.812	18.548
7	0.989	1.239	1.690	2.167	2.833	12.017	14.067	16.013	18.475	20.278
8	1.344	1.646	2.180	2.733	3.490	13.362	15.507	17.535	20.090	21.955
9	1.735	2.088	2.700	3.325	4.168	14.684	16.919	19.023	21.666	23.589
10	2.156	2.558	3.247	3.940	4.865	15.987	18.307	20.483	23.209	25.188
11	2.603	3.053	3.816	4.575	5.578	17.275	19.675	21.920	24.725	26.757
12	3.074	3.571	4.404	5.226	6.304	18.549	21.026	23.337	26.217	28.299
13	3.565	4.107	5.009	5.892	7.042	19.812	22.362	24.736	27.688	29.819
14	4.075	4.660	5.629	6.571	7.790	21.064	23.685	26.119	29.141	31.319
15	4.601	5.229	6.262	7.261	8.547	22.307	24.996	27.488	30.578	32.801
16	5.142	5.812	6.908	7.962	9.312	23.542	26.296	28.845	32.000	34.267
17	5.697	6.408	7.564	8.672	10.085	24.769	27.587	30.191	33.409	35.718
18	6.265	7.015	8.231	9.390	10.865	25.989	28.869	31.526	34.805	37.156
19	6.844	7.633	8.907	10.117	11.651	27.204	30.144	32.852	36.191	38.582
20	7.434	8.260	9.591	10.851	12.443	28.412	31.410	34.170	37.566	39.997
21	8.034	8.897	10.283	11.591	13.240	29.615	32.671	35.479	38.932	41.401
22	8.643	9.542	10.982	12.338	14.042	30.813	33.924	36.781	40.289	42.796
23	9.260	10.196	11.689	13.091	14.848	32.007	35.172	38.076	41.638	44.181
24	9.886	10.856	12.401	13.848	15.659	33.196	36.415	39.364	42.980	45.559
25	10.520	11.524	13.120	14.611	16.473	34.382	37.652	40.646	44.314	46.928
26	11.160	12.198	13.844	15.379	17.292	35.563	38.885	41.923	45.642	48.290
27	11.808	12.879	14.573	16.151	18.114	36.741	40.113	43.194	46.963	49.645
28	12.461	13.565	15.308	16.928	18.939	37.916	41.337	44.461	48.278	50.993
29	13.121	14.257	16.047	17.708	19.768	39.087	42.557	45.722	49.588	52.336
30	13.787	14.954	16.791	18.493	20.599	40.256	43.773	46.979	50.892	53.672
40	20.707	22.164	24.433	26.509	29.051	51.805	55.758	59.342	63.691	66.766
50	27.991	29.707	32.357	34.764	37.689	63.167	67.505	71.420	76.154	79.490
60	35.534	37.485	40.482	43.188	46.459	74.397	79.082	83.298	88.379	91.952
70	43.275	45.442	48.758	51.739	55.329	85.527	90.531	95.023	100.425	104.215
80	51.172	53.540	57.153	60.391	64.278	96.578	101.879	106.629	112.329	116.321
90	59.196	61.754	65.647	69.126	73.291	107.565	113.145	118.136	124.116	128.299
100	67.328	70.065	74.222	77.929	82.358	118.498	124.342	129.561	135.807	140.169



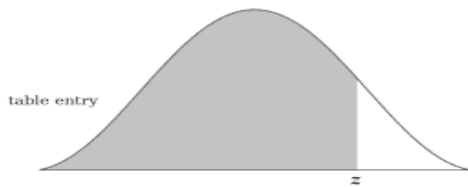
Standard Normal Distribution Tables

z	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
0.0	0.0000	0.0040	0.0080	0.0120	0.0160	0.0199	0.0239	0.0279	0.0319	0.0359
0.1	0.0398	0.0438	0.0478	0.0517	0.0557	0.0596	0.0636	0.0675	0.0714	0.0753
0.2	0.0793	0.0832	0.0871	0.0910	0.0948	0.0987	0.1026	0.1064	0.1103	0.1141
0.3	0.1179	0.1217	0.1255	0.1293	0.1331	0.1368	0.1406	0.1443	0.1480	0.1517
0.4	0.1554	0.1591	0.1628	0.1664	0.1700	0.1736	0.1772	0.1808	0.1844	0.1879
0.5	0.1915	0.1950	0.1985	0.2019	0.2054	0.2088	0.2123	0.2157	0.2190	0.2224
0.6	0.2257	0.2291	0.2324	0.2357	0.2389	0.2422	0.2454	0.2486	0.2517	0.2549
0.7	0.2580	0.2611	0.2642	0.2673	0.2704	0.2734	0.2764	0.2794	0.2823	0.2852
0.8	0.2881	0.2910	0.2939	0.2967	0.2995	0.3023	0.3051	0.3078	0.3106	0.3133
0.9	0.3159	0.3186	0.3212	0.3238	0.3264	0.3289	0.3315	0.3340	0.3365	0.3389
1.0	0.3413	0.3438	0.3461	0.3485	0.3508	0.3531	0.3554	0.3577	0.3599	0.3621
1.1	0.3643	0.3665	0.3686	0.3708	0.3729	0.3749	0.3770	0.3790	0.3810	0.3830
1.2	0.3849	0.3869	0.3888	0.3907	0.3925	0.3944	0.3962	0.3980	0.3997	0.4015
1.3	0.4032	0.4049	0.4066	0.4082	0.4099	0.4115	0.4131	0.4147	0.4162	0.4177
1.4	0.4192	0.4207	0.4222	0.4236	0.4251	0.4265	0.4279	0.4292	0.4306	0.4319
1.5	0.4332	0.4345	0.4357	0.4370	0.4382	0.4394	0.4406	0.4418	0.4429	0.4441
1.6	0.4452	0.4463	0.4474	0.4484	0.4495	0.4505	0.4515	0.4525	0.4535	0.4545
1.7	0.4554	0.4564	0.4573	0.4582	0.4591	0.4599	0.4608	0.4616	0.4625	0.4633
1.8	0.4641	0.4649	0.4656	0.4664	0.4671	0.4678	0.4686	0.4693	0.4699	0.4706
1.9	0.4713	0.4719	0.4726	0.4732	0.4738	0.4744	0.4750	0.4756	0.4761	0.4767
2.0	0.4772	0.4778	0.4783	0.4788	0.4793	0.4798	0.4803	0.4808	0.4812	0.4817
2.1	0.4821	0.4826	0.4830	0.4834	0.4838	0.4842	0.4846	0.4850	0.4854	0.4857
2.2	0.4861	0.4864	0.4868	0.4871	0.4875	0.4878	0.4881	0.4884	0.4887	0.4890
2.3	0.4893	0.4896	0.4898	0.4901	0.4904	0.4906	0.4909	0.4911	0.4913	0.4916
2.4	0.4918	0.4920	0.4922	0.4925	0.4927	0.4929	0.4931	0.4932	0.4934	0.4936
2.5	0.4938	0.4940	0.4941	0.4943	0.4945	0.4946	0.4948	0.4949	0.4951	0.4952
2.6	0.4953	0.4955	0.4956	0.4957	0.4959	0.4960	0.4961	0.4962	0.4963	0.4964
2.7	0.4965	0.4966	0.4967	0.4968	0.4969	0.4970	0.4971	0.4972	0.4973	0.4974
2.8	0.4974	0.4975	0.4976	0.4977	0.4977	0.4978	0.4979	0.4979	0.4980	0.4981
2.9	0.4981	0.4982	0.4982	0.4983	0.4984	0.4984	0.4985	0.4985	0.4986	0.4986
3.0	0.4987	0.4987	0.4987	0.4988	0.4988	0.4989	0.4989	0.4989	0.4990	0.4990
3.1	0.4990	0.4991	0.4991	0.4991	0.4992	0.4992	0.4992	0.4992	0.4993	0.4993
3.2	0.4993	0.4993	0.4994	0.4994	0.4994	0.4994	0.4994	0.4995	0.4995	0.4995
3.3	0.4995	0.4995	0.4995	0.4996	0.4996	0.4996	0.4996	0.4996	0.4996	0.4997
3.4	0.4997	0.4997	0.4997	0.4997	0.4997	0.4997	0.4997	0.4997	0.4997	0.4998
3.5	0.4998	0.4998	0.4998	0.4998	0.4998	0.4998	0.4998	0.4998	0.4998	0.4998
3.6	0.4998	0.4998	0.4999	0.4999	0.4999	0.4999	0.4999	0.4999	0.4999	0.4999
3.7	0.4999	0.4999	0.4999	0.4999	0.4999	0.4999	0.4999	0.4999	0.4999	0.4999
3.8	0.4999	0.4999	0.4999	0.4999	0.4999	0.4999	0.4999	0.4999	0.4999	0.4999



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z	0	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
-0	.50000	.49601	.49202	.48803	.48405	.48006	.47608	.47210	.46812	.46414
-0.1	.46017	.45620	.45224	.44828	.44433	.44034	.43640	.43251	.42858	.42465
-0.2	.42074	.41683	.41294	.40905	.40517	.40129	.39743	.39358	.38974	.38591
-0.3	.38209	.37828	.37448	.37070	.36693	.36317	.35942	.35569	.35197	.34827
-0.4	.34458	.34090	.33724	.33360	.32997	.32636	.32276	.31918	.31561	.31207
-0.5	.30854	.30503	.30153	.29806	.29460	.29116	.28774	.28434	.28096	.27760
-0.6	.27425	.27093	.26763	.26435	.26109	.25785	.25463	.25143	.24825	.24510
-0.7	.24196	.23885	.23576	.23270	.22965	.22663	.22363	.22065	.21770	.21476
-0.8	.21186	.20897	.20611	.20327	.20045	.19766	.19489	.19215	.18943	.18673
-0.9	.18406	.18141	.17879	.17619	.17361	.17106	.16853	.16602	.16354	.16109
-1	.15866	.15625	.15386	.15151	.14917	.14686	.14457	.14231	.14007	.13786
-1.1	.13567	.13350	.13136	.12924	.12714	.12507	.12302	.12100	.11900	.11702
-1.2	.11507	.11314	.11123	.10935	.10749	.10565	.10383	.10204	.10027	.09853
-1.3	.09680	.09510	.09342	.09176	.09012	.08851	.08692	.08534	.08379	.08226
-1.4	.08076	.07927	.07780	.07636	.07493	.07353	.07215	.07078	.06944	.06811
-1.5	.06681	.06552	.06426	.06301	.06178	.06057	.05938	.05821	.05705	.05592
-1.6	.05480	.05370	.05262	.05155	.05050	.04947	.04846	.04746	.04648	.04551
-1.7	.04457	.04363	.04272	.04182	.04093	.04006	.03920	.03836	.03754	.03673
-1.8	.03593	.03515	.03438	.03362	.03288	.03216	.03144	.03074	.03005	.02938
-1.9	.02872	.02807	.02743	.02680	.02619	.02559	.02500	.02442	.02385	.02330
-2	.02275	.02222	.02169	.02118	.02068	.02018	.01970	.01923	.01876	.01831
-2.1	.01786	.01743	.01700	.01659	.01618	.01578	.01539	.01500	.01463	.01426
-2.2	.01390	.01355	.01321	.01287	.01255	.01222	.01191	.01160	.01130	.01101
-2.3	.01072	.01044	.01017	.00990	.00964	.00939	.00914	.00889	.00866	.00842
-2.4	.00820	.00798	.00776	.00755	.00734	.00714	.00695	.00676	.00657	.00639
-2.5	.00621	.00604	.00587	.00570	.00554	.00539	.00523	.00508	.00494	.00480
-2.6	.00466	.00453	.00440	.00427	.00415	.00402	.00391	.00379	.00368	.00357
-2.7	.00347	.00336	.00326	.00317	.00307	.00298	.00289	.00280	.00272	.00264
-2.8	.00256	.00248	.00240	.00233	.00226	.00219	.00212	.00205	.00199	.00193
-2.9	.00187	.00181	.00175	.00169	.00164	.00159	.00154	.00149	.00144	.00139
-3	.00135	.00131	.00126	.00122	.00118	.00114	.00111	.00107	.00104	.00100
-3.1	.00097	.00094	.00090	.00087	.00084	.00082	.00079	.00076	.00074	.00071
-3.2	.00069	.00066	.00064	.00062	.00060	.00058	.00056	.00054	.00052	.00050
-3.3	.00048	.00047	.00045	.00043	.00042	.00040	.00039	.00038	.00036	.00035
-3.4	.00034	.00032	.00031	.00030	.00029	.00028	.00027	.00026	.00025	.00024
-3.5	.00023	.00022	.00022	.00021	.00020	.00019	.00019	.00018	.00017	.00017
-3.6	.00016	.00015	.00015	.00014	.00014	.00013	.00013	.00012	.00012	.00011
-3.7	.00011	.00010	.00010	.00010	.00009	.00009	.00008	.00008	.00008	.00008
-3.8	.00007	.00007	.00007	.00006	.00006	.00006	.00006	.00005	.00005	.00005
-3.9	.00005	.00005	.00004	.00004	.00004	.00004	.00004	.00004	.00003	.00003
-4	.00003	.00003	.00003	.00003	.00003	.00003	.00002	.00002	.00002	.00002



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z	0	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
+0	.50000	.50399	.50798	.51197	.51595	.51994	.52392	.52790	.53188	.53586
+0.1	.53983	.54380	.54776	.55172	.55567	.55966	.56360	.56749	.57142	.57535
+0.2	.57926	.58317	.58706	.59095	.59483	.59871	.60257	.60642	.61026	.61409
+0.3	.61791	.62172	.62552	.62930	.63307	.63683	.64058	.64431	.64803	.65173
+0.4	.65542	.65910	.66276	.66640	.67003	.67364	.67724	.68082	.68439	.68793
+0.5	.69146	.69497	.69847	.70194	.70540	.70884	.71226	.71566	.71904	.72240
+0.6	.72575	.72907	.73237	.73565	.73891	.74215	.74537	.74857	.75175	.75490
+0.7	.75804	.76115	.76424	.76730	.77035	.77337	.77637	.77935	.78230	.78524
+0.8	.78814	.79103	.79389	.79673	.79955	.80234	.80511	.80785	.81057	.81327
+0.9	.81594	.81859	.82121	.82381	.82639	.82894	.83147	.83398	.83646	.83891
+1	.84134	.84375	.84614	.84849	.85083	.85314	.85543	.85769	.85993	.86214
+1.1	.86433	.86650	.86864	.87076	.87286	.87493	.87698	.87900	.88100	.88298
+1.2	.88493	.88686	.88877	.89065	.89251	.89435	.89617	.89796	.89973	.90147
+1.3	.90320	.90490	.90658	.90824	.90988	.91149	.91308	.91466	.91621	.91774
+1.4	.91924	.92073	.92220	.92364	.92507	.92647	.92785	.92922	.93056	.93189
+1.5	.93319	.93448	.93574	.93699	.93822	.93943	.94062	.94179	.94295	.94408
+1.6	.94520	.94630	.94738	.94845	.94950	.95053	.95154	.95254	.95352	.95449
+1.7	.95543	.95637	.95728	.95818	.95907	.95994	.96080	.96164	.96246	.96327
+1.8	.96407	.96485	.96562	.96638	.96712	.96784	.96856	.96926	.96995	.97062
+1.9	.97128	.97193	.97257	.97320	.97381	.97441	.97500	.97558	.97615	.97670
+2	.97725	.97778	.97831	.97882	.97932	.97982	.98030	.98077	.98124	.98169
+2.1	.98214	.98257	.98300	.98341	.98382	.98422	.98461	.98500	.98537	.98574
+2.2	.98610	.98645	.98679	.98713	.98745	.98778	.98809	.98840	.98870	.98899
+2.3	.98928	.98956	.98983	.99010	.99036	.99061	.99086	.99111	.99134	.99158
+2.4	.99180	.99202	.99224	.99245	.99266	.99286	.99305	.99324	.99343	.99361
+2.5	.99379	.99396	.99413	.99430	.99446	.99461	.99477	.99492	.99506	.99520
+2.6	.99534	.99547	.99560	.99573	.99585	.99598	.99609	.99621	.99632	.99643
+2.7	.99653	.99664	.99674	.99683	.99693	.99702	.99711	.99720	.99728	.99736
+2.8	.99744	.99752	.99760	.99767	.99774	.99781	.99788	.99795	.99801	.99807
+2.9	.99813	.99819	.99825	.99831	.99836	.99841	.99846	.99851	.99856	.99861
+3	.99865	.99869	.99874	.99878	.99882	.99886	.99889	.99893	.99896	.99900
+3.1	.99903	.99906	.99910	.99913	.99916	.99918	.99921	.99924	.99926	.99929
+3.2	.99931	.99934	.99936	.99938	.99940	.99942	.99944	.99946	.99948	.99950
+3.3	.99952	.99953	.99955	.99957	.99958	.99960	.99961	.99962	.99964	.99965
+3.4	.99966	.99968	.99969	.99970	.99971	.99972	.99973	.99974	.99975	.99976
+3.5	.99977	.99978	.99978	.99979	.99980	.99981	.99981	.99982	.99983	.99983
+3.6	.99984	.99985	.99985	.99986	.99986	.99987	.99987	.99988	.99988	.99989
+3.7	.99989	.99990	.99990	.99990	.99991	.99991	.99992	.99992	.99992	.99992
+3.8	.99993	.99993	.99993	.99994	.99994	.99994	.99994	.99995	.99995	.99995
+3.9	.99995	.99995	.99996	.99996	.99996	.99996	.99996	.99996	.99997	.99997
+4	.99997	.99997	.99997	.99997	.99997	.99997	.99998	.99998	.99998	.99998