

APPENDIX A – ENGLISH RESEARCH QUESTIONNAIRE

The Influence of Service Quality on Customer Loyalty

At 31 Pare House Restaurant Medan

Good Morning / Afternoon / Evening

Please be willing to fill out this questionnaire. This questionnaire is a questionnaire that

the authors arrange in the context of conducting research. "The Effect of Service Quality

on Customer Loyalty at the 31 Medan Pare House Restaurant". The information and data you fill are used by researchers as data collection for preparation of thesis

assignments. For this reason, it is hoped that you will be willing to take the time to fill

out a questionnaire / statement from the questionnaire. Thank you

I. Corresponden Identity

Respondent Name :

Age : <20
 20-25
 26-30
 31-35
 36-40
 >40

Gender : Pria / Wanita

II. Instructions for Completing the Questionnaire:

For the following questions / questions, please be willing to give an answer according to the conditions received so far, by giving a sign (√) in the approval column (which best suits your condition), provided that:

Level of Service Quality and Customer Satisfaction:

SERVICE QUALITY

No	Questionn	Level				
		STS 1	TS 2	N 3	S 4	SS 5
1	The appearance of employee is neat					
2	Restaurant cleanliness is maintained					
3	The ordered food menu is always on time					
4	Ability of restaurant employee's inside					
	Handle customer complaints very well					
5	Restaurant employees have a friendly attitude					
6	Restaurant employees have competence					
7	Restaurant employees understand customer needs					
8	Restaurant employees pay attention in providing explanations					
CUSTOMER LOYALTY						
9	Committed to visiting this restaurant over and over					
10	Will visit this restaurant again in the future					
11	Have bought and consumed food in this restaurant more than once in this restaurant					
12	Keep buying and consuming food in this restaurant even though prices increase					
13	Recommend as a good place to eat					

14	Not easy to move					
15	Share positive things about this restaurant					



APPENDIX B – INDONESIAN RESEARCH QUESTIONNAIRE

Pengaruh Kualitas Pelayanan Terhadap Loyalitas Konsumen Pada Restoran 31 Pare House Medan

Selamat Pagi / Siang / Malam

Mohon kesediaan Bapak/Ibu/Sdr untuk mengisi kuesioner ini. Kuesioner ini merupakan kuesioner yang penulis susun dalam rangka pelaksanaan penelitian. “Pengaruh Kualitas Pelayanan Terhadap Loyalitas Konsumen Pada Restoran 31 Pare House Medan”. Informasi dan data yang anda isi digunakan oleh peneliti sebagai pengumpulan data penyusunan tugas skripsi. Untuk itu, diharapkan saudara bersedia meluangkan waktu untuk mengisi daftar pertanyaan / pernyataan dari kuesioner. Terimakasih.

II. Identitas Responden

Nama Responden :

Usia : <20
 20-25
 26-30
 31-35
 36-40
 >40

Jenis Kelamin : Pria / Wanita

II. Petunjuk Pengisian Kuisisioner :

Untuk pertanyaan / pernyataan berikut, dimohon kiranya berkenan memberi jawaban sesuai dengan keadaan yang dirasakan selama ini, dengan cara memberikan tanda (√) pada kolom pernyataan (yang paling sesuai dengan kondisi anda), dengan ketentuan:

Tingkat Kualitas Pelayanan dan Kepuasan Konsumen

SS : Sangat Setuju

N : Netral

STS : Sangat Tidak Setuju

S :Setuju

TS : Tidak Setuju

KUALITAS PELAYAN

No	Indicator	Questionn	Level				
			STS 1	TS 2	N 3	S 4	S 5
1	Reliabilitas	Penampilan karyawan rapi					
2		Kebersihan restoran terjaga					
3	Bukti fisik	Menu makanan yang dipesan selalu tepat waktu datangnya					
4	Daya tanggap	Kemampuan karyawan restoran dalam menangani keluhan pelanggan sangat baik					
5	Jaminan	Karyawan restoran memiliki sikap ramah					
6		Karyawan restoran memiliki kompetensi					
7	Empati	Karyawan restoran mengerti kebutuhan pelanggan					
8		Karyawan restoran memberikan perhatian dalam memberikan penjelasan					
LOYALITAS PELANGGAN							
9	pembelian berulang	Kebersihan restoran terjaga					
10		Menu makanan yang dipesan selalu tepat waktu datangnya					
11	Pembelian di luar lini produk dan jasa	Kemampuan karyawan restoran dalam menangani keluhan pelanggan sangat baik					
12		Karyawan restoran memiliki sikap ramah					

13	Merekomendasikan produk	Karyawan restoran memiliki kompetensi					
14		Berkomitmen untuk mengunjungi restoran ini berulang					
15		Akan berkunjung kembali ke restoran ini di waktu mendatang					



APPENDIX C: RESULT OF RESPONDENT FOR SERVICE QUALITY (VARIABLEX)

Service Quality (X)

RESP.	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	TOT.
1	2	3	3	3	1	4	4	3	23
2	3	3	3	3	3	3	3	3	24
3	4	4	5	5	5	2	3	4	31
4	4	3	5	4	3	2	3	4	28
5	3	4	4	3	4	3	5	2	28
6	5	3	4	4	4	4	4	5	32
7	2	4	1	3	5	4	5	3	27
8	4	4	3	3	3	3	4	3	27
9	4	2	4	3	3	3	5	3	27
10	3	3	4	1	1	3	2	3	20
11	3	3	3	2	3	3	5	3	25
12	3	4	3	2	3	3	5	4	27
13	3	3	3	4	2	3	4	2	22
14	3	3	4	4	2	3	4	4	27
15	3	4	4	5	5	3	4	3	31
16	5	4	4	5	4	4	4	4	34
17	3	3	2	3	3	3	3	3	23
18	3	3	3	3	3	3	2	3	23
19	2	3	3	3	3	3	3	3	23
20	5	5	5	5	5	5	5	5	40
21	3	3	3	2	3	4	4	3	25
22	4	3	4	4	4	5	5	5	34
23	4	4	4	4	4	4	4	4	32
24	5	4	4	4	4	5	5	4	35
25	4	4	3	3	4	2	2	4	26
26	4	3	3	3	3	5	3	3	27
27	4	4	4	5	5	5	3	4	34
28	3	3	3	4	4	4	3	3	27
29	4	4	4	4	4	4	3	4	31
30	4	4	4	4	3	4	3	3	29

**APPENDIX D: RESULT OF RESPONDENT FOR CUSTOMER
LOYALTY (VARIABLE Y)**

Customer Loyaly (Y)

RESP.	Q1	Q2	Q3	Q4	Q5	Q6	Q7	TOT.
1	5	1	4	3	4	5	5	27
2	3	3	3	3	3	4	4	23
3	2	4	3	5	3	3	3	23
4	4	3	3	5	3	4	5	27
5	3	4	5	4	5	5	4	30
6	4	4	4	4	3	3	4	26
7	3	5	5	1	5	5	4	28
8	3	3	4	3	4	3	4	24
9	3	3	5	4	4	4	5	28
10	2	1	2	4	4	5	3	21
11	2	3	5	3	3	4	4	24
12	4	3	5	3	4	4	4	27
13	3	2	4	3	3	5	4	24
14	3	2	4	4	4	4	4	25
15	5	5	4	4	3	5	3	29
16	5	4	4	4	3	5	4	29
17	4	3	3	2	3	3	3	21
18	3	3	2	3	4	2	2	19
19	4	3	3	3	3	4	5	25
20	5	5	5	5	5	5	4	34
21	3	3	4	3	3	3	4	23
22	5	4	5	4	5	5	4	32
23	3	4	4	4	4	3	4	26
24	4	4	5	4	4	4	5	30
25	5	4	2	3	4	5	3	26
26	4	3	3	3	3	2	2	20
27	4	5	3	4	4	4	5	29
28	5	4	3	3	2	3	3	23
29	4	4	3	4	4	3	3	25
30	5	3	3	4	3	5	4	27

APPENDIX E: SPSS PROCESSING RESULT OUTPUT

		Correlations X								
		x1	x2	x3	x4	x5	x6	x7	x8	Total
x1	Pearson Correlation	1	.353	.627**	.487**	.410*	.333	.093	.647**	.754**
	Sig. (2-tailed)		.056	.000	.006	.025	.072	.626	.000	.000
	N	30	30	30	30	30	30	30	30	30
x2	Pearson Correlation	.353	1	.225	.497**	.603**	.215	.153	.316	.625**
	Sig. (2-tailed)	.056		.231	.005	.000	.253	.420	.089	.000
	N	30	30	30	30	30	30	30	30	30
x3	Pearson Correlation	.627**	.225	1	.526**	.139	.021	.011	.492**	.578**
	Sig. (2-tailed)	.000	.231		.003	.463	.913	.954	.006	.001
	N	30	30	30	30	30	30	30	30	30
x4	Pearson Correlation	.487**	.497**	.526**	1	.647**	.281	.041	.488**	.780**
	Sig. (2-tailed)	.006	.005	.003		.000	.133	.831	.006	.000
	N		30	30	30	30	30	30	30	30
x5	Pearson Correlation	.410*	.603**	.139	.647**	1	.318	.244	.403*	.743**
	Sig. (2-tailed)	.025	.000	.463	.000		.087	.193	.027	.000
	N	30	30	30	30	30	30	30	30	30
x6	Pearson Correlation	.333	.215	.021	.281	.318	1	.323	.323	.553**
	Sig. (2-tailed)	.072	.253	.913	.133	.087		.081	.082	.002
	N	30	30	30	30	30	30	30	30	30
x7	Pearson Correlation	.093	.153	.011	.041	.244	.323	1	.124	.404*
	Sig. (2-tailed)	.626	.420	.954	.831	.193	.081		.514	.027
	N	30	30	30	30	30	30	30	30	30
x8	Pearson Correlation	.647**	.316	.492**	.488**	.403*	.323	.124	1	.720**
	Sig. (2-tailed)	.000	.089	.006	.006	.027	.082	.514		.000
	N	30	30	30	30	30	30	30	30	30
Total	Pearson Correlation	.754**	.625**	.578**	.780**	.743**	.553**	.404*	.720**	1
	Sig. (2-tailed)	.000	.000	.001	.000	.000	.002	.027	.000	
	N	30	30	30	30	30	30	30	30	30

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Correlations Y									
		y1	y2	y3	y4	y5	y6	y7	total
y1	Pearson Correlation	1	.312	-.005	.093	-.043	.282	.070	.478**
	Sig. (2-tailed)		.093	.980	.626	.822	.131	.712	.007
	N	30	30	30	30	30	30	30	30
y2	Pearson Correlation	.312	1	.244	.139	.191	.014	-.040	.522**
	Sig. (2-tailed)	.093		.193	.463	.311	.942	.834	.003
	N	30	30	30	30	30	30	30	30
y3	Pearson Correlation	-.005	.244	1	.011	.417*	.319	.492**	.649**
	Sig. (2-tailed)	.980	.193		.954	.022	.086	.006	.000
	N	30	30	30	30	30	30	30	30
y4	Pearson Correlation	.093	.139	.011	1	.045	.105	.176	.396*
	Sig. (2-tailed)	.626	.463	.954		.812	.580	.352	.030
	N	30	30	30	30	30	30	30	30
y5	Pearson Correlation	-.043	.191	.417*	.045	1	.357	.171	.530**
	Sig. (2-tailed)	.822	.311	.022	.812		.053	.366	.003
	N	30	30	30	30	30	30	30	30
y6	Pearson Correlation	.282	.014	.319	.105	.357	1	.422*	.651**
	Sig. (2-tailed)	.131	.942	.086	.580	.053		.020	.000
	N	30	30	30	30	30	30	30	30
y7	Pearson Correlation	.070	-.040	.492**	.176	.171	.422*	1	.580**
	Sig. (2-tailed)	.712	.834	.006	.352	.366	.020		.001
	N	30	30	30	30	30	30	30	30
total	Pearson Correlation	.478**	.522**	.649**	.396*	.530**	.651**	.580**	1
	Sig. (2-tailed)	.007	.003	.000	.030	.003	.000	.001	
	N	30	30	30	30	30	30	30	30
** . Correlation is significant at the 0.01 level (2-tailed).									
* . Correlation is significant at the 0.05 level (2-tailed).									

Descriptive Statistics							
	N	Minimum	Maximum	Mode	Median	Mean	Std. Deviation
Service Quality	30	20	40	27	27	28.06	4.570
Customer Loyalty	30	19	34	23	26	25.83	3.504
Valid N (listwise)	30						

Gender	Frequency	Percent	Cumulative Percent
Female	15	50.0	50.0
Male	15	50.0	100.0
Total	30	100.0	

x1

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid ts	3	10.0	10.0	10.0
n	12	40.0	40.0	50.0
s	11	36.7	36.7	86.7
ss	4	13.3	13.3	100.0
Total	30	100.0	100.0	

x2

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid ts	1	3.3	3.3	3.3
n	15	50.0	50.0	53.3
s	13	43.3	43.3	96.7
ss	1	3.3	3.3	100.0
Total	30	100.0	100.0	

x3

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid sts	1	3.3	3.3	3.3
ts	1	3.3	3.3	6.7
n	12	40.0	40.0	46.7
s	13	43.3	43.3	90.0
ss	3	10.0	10.0	100.0
Total	30	100.0	100.0	

x4

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid sts	1	3.3	3.3	3.3
ts	4	13.3	13.3	16.7
n	12	40.0	40.0	56.7
s	8	26.7	26.7	83.3
ss	5	16.7	16.7	100.0
Total	30	100.0	100.0	

x5

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid sts	2	6.7	6.7	6.7
ts	2	6.7	6.7	13.3
n	12	40.0	40.0	53.3
s	10	33.3	33.3	86.7
ss	4	13.3	13.3	100.0
Total	30	100.0	100.0	

x6

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid ts	3	10.0	10.0	10.0
n	13	43.3	43.3	53.3
s	9	30.0	30.0	83.3
ss	5	16.7	16.7	100.0
Total	30	100.0	100.0	

x7

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid ts	3	10.0	10.0	10.0
n	10	33.3	33.3	43.3
s	9	30.0	30.0	73.3
ss	8	26.7	26.7	100.0
Total	30	100.0	100.0	

x8

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid ts	2	6.7	6.7	6.7
n	15	50.0	50.0	56.7
s	10	33.3	33.3	90.0
ss	3	10.0	10.0	100.0
Total	30	100.0	100.0	

y1

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid ts	3	10.0	10.0	10.0
n	10	33.3	33.3	43.3
s	9	30.0	30.0	73.3
ss	8	26.7	26.7	100.0
Total	30	100.0	100.0	

y2

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid sts	2	6.7	6.7	6.7
ts	2	6.7	6.7	13.3
n	12	40.0	40.0	53.3
s	10	33.3	33.3	86.7
ss	4	13.3	13.3	100.0
Total	30	100.0	100.0	

y3

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid ts	3	10.0	10.0	10.0
n	10	33.3	33.3	43.3
s	9	30.0	30.0	73.3
ss	8	26.7	26.7	100.0
Total	30	100.0	100.0	

y4

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid sts	1	3.3	3.3	3.3
ts	1	3.3	3.3	6.7
n	12	40.0	40.0	46.7
s	13	43.3	43.3	90.0
ss	3	10.0	10.0	100.0
Total	30	100.0	100.0	

y5

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid ts	1	3.3	3.3	3.3
n	13	43.3	43.3	46.7
s	12	40.0	40.0	86.7
ss	4	13.3	13.3	100.0
Total	30	100.0	100.0	

y6

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid ts	2	6.7	6.7	6.7
n	8	26.7	26.7	33.3
s	9	30.0	30.0	63.3
ss	11	36.7	36.7	100.0
Total	30	100.0	100.0	

y7

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid ts	2	6.7	6.7	6.7
n	7	23.3	23.3	30.0
s	15	50.0	50.0	80.0
ss	6	20.0	20.0	100.0
Total	30	100.0	100.0	

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		30
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	3.11095283
Most Extreme Differences	Absolute	.125
	Positive	.095
	Negative	-.125
Test Statistic		.125
Asymp. Sig. (2-tailed)		.200 ^{c,d}

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. This is a lower bound of the true significance.

Correlations

		Service Quality	Customer Loyalty
Service Quality	Pearson Correlation	1	.733**
	Sig. (2-tailed)		.000
	N	30	30
Customer Loyalty	Pearson Correlation	.733**	1
	Sig. (2-tailed)	.000	
	N	30	30

** . Correlation is significant at the 0.01 level (2-tailed).

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.733 ^a	.537	.520	3.166

a. Predictors: (Constant), Customer Loyalty

b. Dependent Variable: Service Quality

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	10.067	2.803		3.591	.001
	Servicequality	.562	.099	.733	5.696	.000

a. Dependent Variable: Customersloyalty



**APPENDIX F: PHOTO SESSION DURING THE OBSERVATION
AT 31 PARE HOUSE RESTAURANT MEDAN**





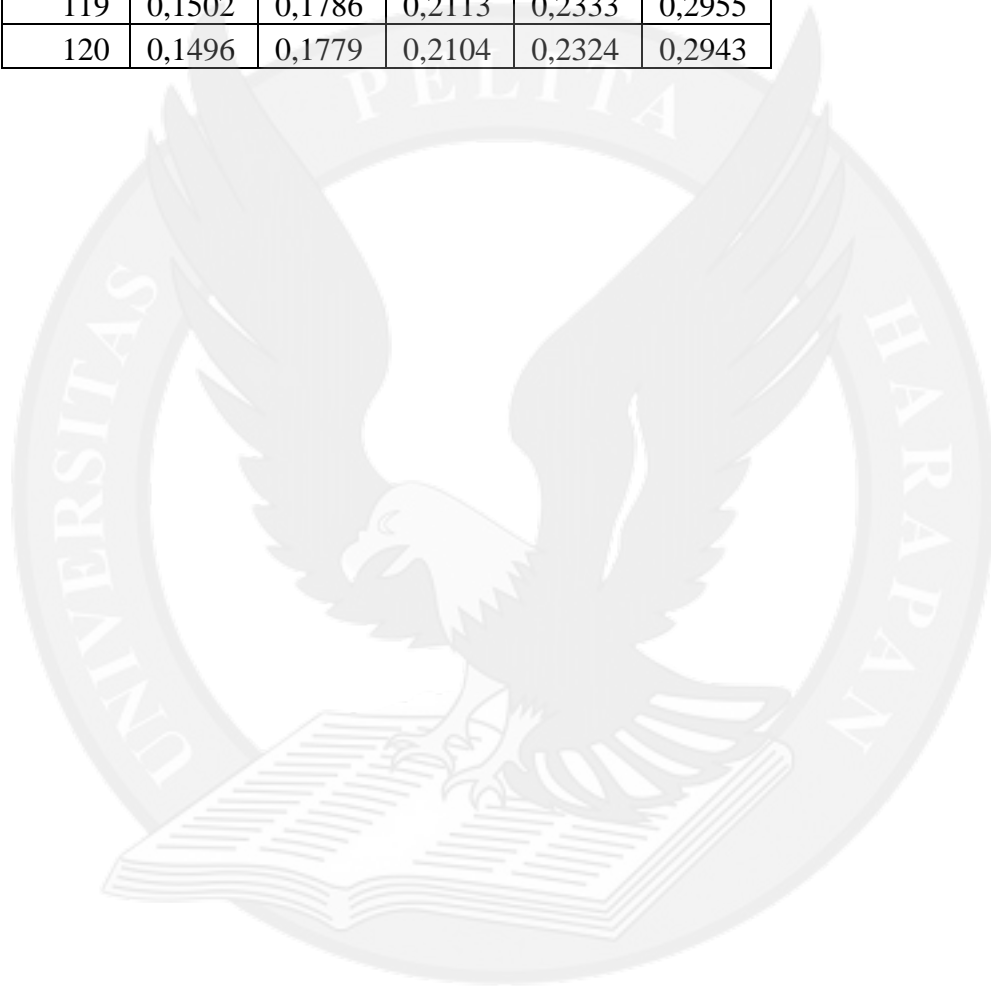
APPENDIX G: R – TABLE

DF = n-2	Significance Levels For 1-way Test				
	0,05	0,025	0,001	0,005	0,0005
	Significance Levels For 2-way Test				
	0,1	0,05	0,02	0,01	0,001
1	0,9877	0,9969	0,9995	0,9999	10,000
2	0,9000	0,9500	0,9800	0,9900	0,9990
3	0,8054	0,8783	0,9343	0,9587	0,9911
4	0,7293	0,8114	0,8822	0,9172	0,9741
5	0,6694	0,7545	0,8329	0,8745	0,9509
6	0,6215	0,7067	0,7887	0,8343	0,9249
7	0,5822	0,6664	0,7498	0,7977	0,8983
8	0,5494	0,6319	0,7155	0,7646	0,8721
9	0,5214	0,6021	0,6851	0,7348	0,8470
10	0,4973	0,5760	0,6581	0,7079	0,8233
11	0,4762	0,5529	0,6339	0,6835	0,8010
12	0,4575	0,5324	0,6120	0,6614	0,7800
13	0,4409	0,5140	0,5923	0,6411	0,7604
14	0,4259	0,4973	0,5742	0,6226	0,7419
15	0,4124	0,4821	0,5577	0,6055	0,7247
16	0,4000	0,4683	0,5425	0,5897	0,7084
17	0,3887	0,4555	0,5285	0,5751	0,6932
18	0,3783	0,4438	0,5155	0,5614	0,6788
19	0,3687	0,4329	0,5034	0,5487	0,6652
20	0,3598	0,4227	0,4921	0,5368	0,6524
21	0,3515	0,4132	0,4815	0,5256	0,6402
22	0,3438	0,4044	0,4716	0,5151	0,6287
23	0,3365	0,3961	0,4622	0,5052	0,6178
24	0,3297	0,3882	0,4534	0,4958	0,6074
25	0,3233	0,3809	0,4451	0,4869	0,5974
26	0,3172	0,3739	0,4372	0,4785	0,5880
27	0,3115	0,3673	0,4297	0,4705	0,5790
28	0,3061	0,3610	0,4226	0,4629	0,5703
29	0,3009	0,3550	0,4158	0,4556	0,5620
30	0,2960	0,3494	0,4093	0,4487	0,5541
31	0,2913	0,3440	0,4032	0,4421	0,5465
32	0,2869	0,3388	0,3972	0,4357	0,5392
33	0,2826	0,3338	0,3916	0,4296	0,5322
34	0,2785	0,3291	0,3862	0,4238	0,5254
35	0,2746	0,3246	0,3810	0,4182	0,5189

36	0,2709	0,3202	0,3760	0,4128	0,5126
37	0,2673	0,3160	0,3712	0,4076	0,5066
38	0,2638	0,3120	0,3665	0,4026	0,5007
39	0,2605	0,3081	0,3621	0,3978	0,4950
40	0,2573	0,3044	0,3578	0,3932	0,4896
41	0,2542	0,3008	0,3536	0,3887	0,4843
42	0,2512	0,2973	0,3496	0,3843	0,4791
43	0,2483	0,2940	0,3457	0,3801	0,4742
44	0,2455	0,2907	0,3420	0,3761	0,4694
45	0,2429	0,2876	0,3384	0,3721	0,4647
46	0,2403	0,2845	0,3348	0,3683	0,4601
47	0,2377	0,2816	0,3314	0,3646	0,4557
48	0,2353	0,2787	0,3281	0,3610	0,4514
49	0,2329	0,2759	0,3249	0,3575	0,4473
50	0,2306	0,2732	0,3218	0,3542	0,4432
51	0,2284	0,2706	0,3188	0,3509	0,4393
52	0,2262	0,2681	0,3158	0,3477	0,4354
53	0,2241	0,2656	0,3129	0,3445	0,4317
54	0,2221	0,2632	0,3102	0,3415	0,4280
55	0,2201	0,2609	0,3074	0,3385	0,4244
56	0,2181	0,2586	0,3048	0,3357	0,4210
57	0,2162	0,2564	0,3022	0,3328	0,4176
58	0,2144	0,2542	0,2997	0,3301	0,4143
59	0,2126	0,2521	0,2972	0,3274	0,4110
60	0,2108	0,2500	0,2948	0,3248	0,4079
61	0,2091	0,2480	0,2925	0,3223	0,4048
62	0,2075	0,2461	0,2902	0,3198	0,4018
63	0,2058	0,2441	0,2880	0,3173	0,3988
64	0,2042	0,2423	0,2858	0,3150	0,3959
65	0,2027	0,2404	0,2837	0,3126	0,3931
66	0,2012	0,2387	0,2816	0,3104	0,3903
67	0,1997	0,2369	0,2796	0,3081	0,3876
68	0,1982	0,2352	0,2776	0,3060	0,3850
69	0,1968	0,2335	0,2756	0,3038	0,3823
70	0,1954	0,2319	0,2737	0,3017	0,3798

71	0,1940	0,2303	0,2718	0,2997	0,3773
72	0,1927	0,2287	0,2700	0,2977	0,3748
73	0,1914	0,2272	0,2682	0,2957	0,3724
74	0,1901	0,2257	0,2664	0,2938	0,3701
75	0,1888	0,2242	0,2647	0,2919	0,3678
76	0,1876	0,2227	0,2630	0,2900	0,3655
77	0,1864	0,2213	0,2613	0,2882	0,3633
78	0,1852	0,2199	0,2597	0,2864	0,3611
79	0,1841	0,2185	0,2581	0,2847	0,3589
80	0,1829	0,2172	0,2565	0,2830	0,3568
81	0,1818	0,2159	0,2550	0,2813	0,3547
82	0,1807	0,2146	0,2535	0,2796	0,3527
83	0,1796	0,2133	0,2520	0,2780	0,3507
84	0,1786	0,2120	0,2505	0,2764	0,3487
85	0,1775	0,2108	0,2491	0,2748	0,3468
86	0,1765	0,2096	0,2477	0,2732	0,3449
87	0,1755	0,2084	0,2463	0,2717	0,3430
88	0,1745	0,2072	0,2449	0,2702	0,3412
89	0,1735	0,2061	0,2435	0,2687	0,3393
90	0,1726	0,2050	0,2422	0,2673	0,3375
91	0,1716	0,2039	0,2409	0,2659	0,3358
92	0,1707	0,2028	0,2396	0,2645	0,3341
93	0,1698	0,2017	0,2384	0,2631	0,3323
94	0,1689	0,2006	0,2371	0,2617	0,3307
95	0,1680	0,1996	0,2359	0,2604	0,3290
96	0,1671	0,1986	0,2347	0,2591	0,3274
97	0,1663	0,1975	0,2335	0,2578	0,3258
98	0,1654	0,1966	0,2324	0,2565	0,3242
99	0,1646	0,1956	0,2312	0,2552	0,3226
100	0,1638	0,1946	0,2301	0,2540	0,3211
101	0,1630	0,1937	0,2290	0,2528	0,3196
102	0,1622	0,1927	0,2279	0,2515	0,3181
103	0,1614	0,1918	0,2268	0,2504	0,3166
104	0,1606	0,1909	0,2257	0,2492	0,3152
105	0,1599	0,1900	0,2247	0,2480	0,3137
106	0,1591	0,1891	0,2236	0,2469	0,3123
107	0,1584	0,1882	0,2226	0,2458	0,3109
108	0,1576	0,1874	0,2216	0,2446	0,3095
109	0,1569	0,1865	0,2206	0,2436	0,3082

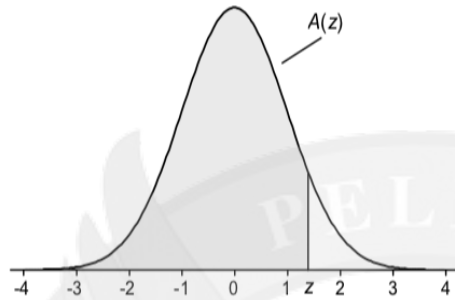
110	0,1562	0,1857	0,2196	0,2425	0,3068
111	0,1555	0,1848	0,2186	0,2414	0,3055
112	0,1548	0,1840	0,2177	0,2403	0,3042
113	0,1541	0,1832	0,2167	0,2393	0,3029
114	0,1535	0,1824	0,2158	0,2383	0,3016
115	0,1528	0,1816	0,2149	0,2373	0,3004
116	0,1522	0,1809	0,2139	0,2363	0,2991
117	0,1515	0,1801	0,2131	0,2353	0,2979
118	0,1509	0,1793	0,2122	0,2343	0,2967
119	0,1502	0,1786	0,2113	0,2333	0,2955
120	0,1496	0,1779	0,2104	0,2324	0,2943



APPENDIX H: Z TEST TABLE

Cumulative Standardized Normal Distribution

$A(z)$ is the integral of the standardized normal distribution from $-\infty$ to z (in other words, the area under the curve to the left of z). It gives the probability of a normal random variable not being more than z standard deviations above its mean. Values of z of particular importance:



z	$A(z)$	
1.645	0.9500	Lower limit of right 5% tail
1.960	0.9750	Lower limit of right 2.5% tail
2.326	0.9900	Lower limit of right 1% tail
2.576	0.9950	Lower limit of right 0.5% tail
3.090	0.9990	Lower limit of right 0.1% tail
3.291	0.9995	Lower limit of right 0.05% tail

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							

