

	Confidence level = 95%			Confidence level = 99%		
	Margin of error			Margin of error		
Population size	5%	2,5%	1%	5%	2,5%	1%
100	80	94	99	87	96	99
500	217	377	475	285	421	485
1.000	278	606	906	399	727	943
10.000	370	1.332	4.899	622	2.098	6.239
100.000	383	1.513	8.762	659	2.585	14.227
500.000	384	1.532	9.423	663	2.640	16.055
1.000.000	384	1.534	9.512	663	2.647	16.317

Table 1: Table for Determining Minimum Returned Sample Size for a Given Population Size for Continuous and Categorical Data

Population size	Sample size					
	Continuous data (margin of error = .03)			Categorical data (margin of error = .05)		
	alpha = .10 t = 1.65	alpha = .05 t = 1.96	alpha = .01 t = 2.58	p = .50 t = 1.65	p = .50 t = 1.96	p = .50 t = 2.58
100	46	55	68	74	80	87
200	59	75	102	116	132	154
300	65	85	123	143	169	207
400	69	92	137	162	196	250
500	72	96	147	176	218	286
600	73	100	155	187	235	316
700	75	102	161	196	249	341
800	76	104	166	203	260	363
900	76	105	170	209	270	382
1,000	77	106	173	213	278	399
1,500	79	110	183	230	306	461
2,000	83	112	189	239	323	499
4,000	83	119	198	254	351	570
6,000	83	119	209	259	362	598
8,000	83	119	209	262	367	613
10,000	83	119	209	264	370	623

NOTE: The margins of error used in the table were .03 for continuous data and .05 for categorical data. Researchers may use this table if the margin of error shown is appropriate for their study; however, the appropriate sample size must be calculated if these error rates are not appropriate. Table developed by Bartlett, Kotrlik, & Higgins.

Confidence Level	90%		95%		99%	
Margin of Error	5.0%	2.5%	5.0%	2.5%	5.0%	2.5%

Population Size						
10	10	10	10	10	10	10
25	23	25	24	25	25	25
50	43	48	45	49	47	50
75	59	71	63	72	68	73
100	74	92	80	94	88	97
150	97	132	109	137	123	143
200	116	169	132	178	154	187
250	131	204	152	216	182	229
300	143	236	169	252	207	270
350	153	265	184	286	230	310
400	162	293	197	318	250	348
450	170	319	208	349	269	385
500	176	343	218	378	286	421
750	200	444	255	505	353	585
1,000	214	520	278	607	400	727
5,000	257	890	357	1,176	586	1,734
10,000	264	977	370	1,333	623	2,098
25,000	268	1,038	379	1,448	647	2,400
50,000	270	1,060	382	1,491	655	2,521
100,000	270	1,071	383	1,514	660	2,586
500,000	271	1,080	384	1,532	663	2,640
1,000,000	271	1,082	384	1,535	664	2,647
2,500,000	271	1,082	385	1,536	664	2,652
10,000,000	271	1,083	385	1,537	664	2,654
100,000,000	271	1,083	385	1,537	664	2,654
250,000,000	271	1,083	385	1,537	664	2,654