

Due: Today

1. 400 incoming freshman were asked of their intended major, and 95 of them said business or some business related field. Find a 98% confidence interval for the proportion of incoming freshman who will major in business or a business-related field.

Formula Used:	Parameters:	Computed value(s):

2. Twenty-eight of the employees of A-1 Manufacturing, LLC were polled, and it was determined that they commute an average of 18.1 miles to their work with a standard deviation of 1.8 miles. Find a 98% confidence interval for the true mean commuting distance for all employees of this company.

Formula Used:	Parameters:	Computed value(s):

3. You're tasked with determining the proportion of college students who smoke regularly, but you must collect enough data so that a 90% confidence interval is no more than 0.15 wide. How many students should you poll?

Formula Used:	Parameters:	Computed value(s):

4. In a sample of 64 senior college students, the standard deviation for age was 2.3 years. Compute a 99% confidence interval for the true standard deviation of the population of college seniors.

Formula Used:	Parameters:	Computed value(s):

5. To determine the average cost of a large plain pizza in the Pittsburgh area to within one dollar, we wish to produce a 90% confidence interval. The nationwide standard deviation for this variable is \$2.41. How many pizza shops should be included in the computation?

Formula Used:	Parameters:	Computed value(s):

6. According to a poll of 27 kindergarteners, the average overall time spent watching television was 5000 hours. The historical standard deviation for this statistic is 900 hours. Compute a 95% confidence interval for the true average.

Formula Used:	Parameters:	Computed value(s):

7. Using data from the sales of 228 new Honda Civics from local dealers, these cars sell in 48 days on average. The nationwide standard deviation for sales of Honda Civic is 6.8 days. Compute a 92% confidence interval for how long it takes for a Honda Civic to sell.

Formula Used:	Parameters:	Computed value(s):