Algebra 2 Name:
Pollster's Task #12: Journal Question #3 Period: Date:

Content Standards:
- To explore the relationship between sample size, confidence level, and margin of error.

Process Standards:
-Students will demonstrate effective communication skills when presenting information in written form.

Task:
In Chapter 4, you have learned about sample size, confidence level, and margin of error. These three things are related to each other in the following two formulas: $moe = \pm z * \sigma$ and $\sigma = \sqrt{\frac{.25}{n}}$. As you answer the journal questions, you will describe the relationship between sample size, confidence level, and margin of error. Use examples to support your answers.

1. Assume you want a 5% margin of error for a particular poll. As the sample size increases, what happens to your confidence level? Pick 2 different numbers for 'n' to use as examples to support your answer.

2. Assume you want a 95% confidence level for a particular poll. As the sample size increases, what happens to your margin of error? Pick 2 different numbers for 'n' to use as examples to support your answer.