



# Personal Tutors

## Chapter 16

### Personal Tutor Activity 16.1 – Identify Measures of Variation

- 1. Apply** An engineer has been asked to evaluate the data from a production run. The production line is producing a pipe that should be 27 inches long with a tolerance of plus or minus 1.5 inches. The following table provides the length of the first production run of this pipe. Find the mean, median, and mode for the data set provided. Make notes on any abnormalities you see in the data.
- 2. Starting Hint** Write out the equation first, and then write the numbers you know underneath each part.

Sample #	Length (in inches)
1	25
2	28
3	36
4	22
5	26
6	27
7	25
8	27
9	26
10	29
11	25



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### Personal Tutor Activity 16.2 – Misleading Results

- 1. Apply** An engineer has been provided with the following claims from a manufacturing company. Determine if the engineer should agree and support the claims provided. Company A has produced 100 units of a product that will reach the market in six months. After further review, the Quality Control department has determined that one out of every ten items is defective. You, the engineer, must determine if the product may be released to the market when 10% of the units are defective. Explain your reasoning.
- 2. Starting Hint** Determine what information you need to make an informed decision from the information provided and compare what you know to what you need to know.

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