Name _____ Date _____

Percent Error and Percent Increase - Step-by-Step Lesson

Lesson 1 Percent Problem:

1. Alan needs to purchase a bed sheet for his bedroom. Alan measured the bed as 7 ft. The actual measurement was 6.5 ft. What is Alan's percent error?

Explanation:

When comparing an experimental quantity, *E*, with a theoretical quantity, *T*, which is considered the "correct" value. The percent error is the absolute value of the difference divided by the "correct" value times 100.

$$\% \text{ Error} = \frac{\text{Your value} - \text{Actual value}}{\text{Actual Value}} \times 100$$

$$\% \text{ Error} = \frac{7 - 6.5}{6.5} \times 100$$

$$\%\text{Error} = \frac{.5}{6.5} \times 100$$

$$\%\text{Error} = 7.69\%$$