

Percent Error and Percent Increase



James measured his floor for new carpet. He guessed that its width was 15 feet. The actual width is $12\frac{1}{2}$ feet. What is the percent error?

To Solve:

$$\text{percentage error} = \frac{|\text{approximate value} - \text{exact value}|}{\text{exact value}} \times 100$$

% ERROR

$$15 \text{ ft} - 12.5 = 2.5 \times 100 = \frac{250}{12.5}$$

$$250 \text{ divided by } 12.5 = 20$$