Unit 4 Lesson 14: Percent Error

1 Number Talk: Estimating a Percentage of a Number (Warm up)

Student Task Statement

Estimate.

25% of 15.8

9% of 38

1.2% of 127

0.53% of 6

0.06% of 202

2 Plants, Bicycles, and Crowds

Student Task Statement

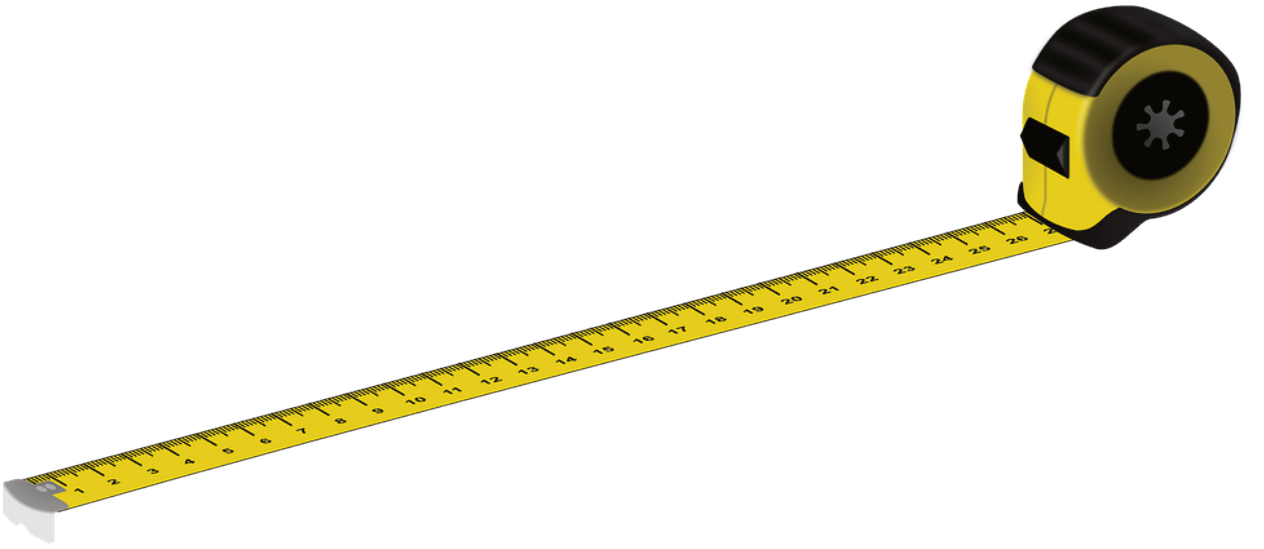
1. Instructions to care for a plant say to water it with $\frac{3}{4}$ cup of water every day. The plant has been getting 25% too much water. How much water has the plant been getting?

2. The pressure on a bicycle tire is 63 psi. This is 5% higher than what the manual says is the correct pressure. What is the correct pressure?

3. The crowd at a sporting event is estimated to be 3,000 people. The exact attendance is 2,486 people. What is the **percent error**?

3 Measuring in the Heat

Images for Launch



Student Task Statement

A metal measuring tape expands when the temperature goes above $50^\circ\mathrm{F}$. For every degree Fahrenheit above 50, its length increases by 0.00064%.

1. The temperature is 100 degrees Fahrenheit. How much longer is a 30-foot measuring tape than its correct length?

2. What is the percent error?