

3-8-19

Aim: SWBAT find the percent error.

HW: Finish Packet Page 23

Test Wednesday

Do Now: Quiz

## Finding the Percent Error

$$\frac{\text{Amt. of Error}}{\text{Actual Amt.}} = \frac{r}{100}$$

The percent error is the result of translating the amount of inaccuracy into a percent.

4. Suppose you guess that there are 300 gumballs in a jar, but there are actually 400 gumballs in the jar. What is your percent error?

$$400 - 300 = 100$$

amt. of  
error

$$\frac{100}{400} = \frac{x}{100}$$

$$\frac{400x}{400} = \frac{10000}{400}$$

$$x = 25$$

5. Joshua uses his thermometer and finds that the boiling point of ethyl alcohol is 75°C. He looks in a reference book and finds that the actual boiling point of ethyl alcohol is 80°C. What is his percent error?

$$80 - 75 = 5$$

amt. of  
error

$$\frac{5}{80} = \frac{x}{100}$$

$$\frac{80x}{80} = \frac{500}{80}$$

$$x = 6.25$$

6. A bridge project was predicted to take 3 years to complete, but due to unforeseen events, it actually took 5 years to complete. What was the percent error?

$$5 - 3 = 2$$

amt. of error

$$\frac{2}{5} = \frac{x}{100}$$

$$\frac{5x}{5} = \frac{200}{5}$$

$$x = 40$$

7. The meteorologist said that there would be 5 inches of snow as a result of the storm. Only 3 inches of snow actually accumulated. What was the percent error?