

Percent of Change and Percent Error

Percent of Change - The percent that a number increases or decreases

(Can be a % Increase or a % Decrease)

To Find Percent of Change...

$\frac{\text{Bigger Number} - \text{Smaller Number}}{\text{Original Number}} \times 100$

Find the Percent of Change:

65 is decreased to 38

Find the Percent of Change:

41 is increased to 92

Find the Percent of Change:

24 to 44

In a given year, Apex had a total of 7.5 inches of rain from January - March and 22.5 inches from April - June. Find the percent of change in the rainfall.



Notes - Percent of Change and Error

In 20 years, the average cost of a gallon of gasoline increased from \$0.88 to \$2.06. Find the percent of change.



Percent Error - The percent that an estimate is off from the actual number.

To Find Percent Error:

$$\frac{\text{Bigger Number} - \text{Smaller Number}}{\text{Actual Number}} \times 100$$

Find the percent error:

Estimate: 85 Actual: 82

Find the percent error:

Estimate: 3400 Actual: 3519

A student calculates the density of a rock to be 3.2 g/ml and the actual value is 4.7 g/ml. What is the student's percent error?



A student made a mistake when measuring the volume of a graduated cylinder. He found the volume to be 65 milliliters, however the real value 50 milliliters. What is the percent error?

