

PERCENT OF CHANGE

$$\text{P.O.C.}^* = \frac{\text{amount of change}}{\text{original amount}}$$

* Express the p.o.c. as a percent. Example: $0.04 = 4\%$

Percent of Increase

Example 1:

When Jim was exercising, his heart rate went from 70 beats to 100 beats per minute. What was the percent increase?

Example 2:

A population of squirrels rose from 300 to 500 over a period of 3 years. What is the percent increase, to the nearest tenth of a percent?

Percent of Decrease

Example 1:

In 1999, a certain stock was worth \$1.25 a share. In 2002, the same stock was worth \$0.65 a share. What was the percent decrease?

Example 2:

The boiling point of water is lower at higher altitudes. Water boils at 212°F at sea level and 193.7°F at 10,000 ft. What is the percent decrease in the temperature, to the nearest tenth of a percent?

Discounts

Example 1:

Sarah bought a DVD player originally priced at \$150 that was discounted by 20%. What was the price after the discount?

Step 1: Amount of Discount = Price \times % of Discount

Step 2: Discounted Price = Original Price - Amt. of Discount

Mark-up

Example 1:

Mr. Glass has a computer business in which he marks everything up 40% above the wholesale price. If he purchased a printer for \$85 wholesale, what will be the retail price?

Step 1: Amount of Markup = Price \times % of Markup

Step 2: Markup Price = Original Price + Amt. of Markup