

Percent of Increase or Decrease*

To find a percent of increase or decrease, use one of these equations:

$$\frac{\text{Percent of Increase}}{100\%} = \frac{\text{Amount of Increase}}{\text{Original Amount}}$$

$$\frac{\text{Percent of Decrease}}{100\%} = \frac{\text{Amount of Decrease}}{\text{Original Amount}}$$

EXAMPLE: A price increased from \$120 to \$135. Find the percent on increase.

$$\frac{\text{Percent of Increase}}{100\%} = \frac{\text{Amount of Increase}}{\text{Original Amount}}$$

Start with the words

$$\frac{\text{---}\%}{100\%} = \frac{\$135 - \$120}{\$120}$$

Fill in the numbers you know.

$$\frac{\text{---}\%}{100\%} = \frac{\$15}{\$120}$$

Calculate the amount of increase

$$\frac{\text{---}\%}{100\%} = \frac{\$15}{\$120}$$

Multiply the Couple

Multiply the couple & divide by the odd man out

$$12.5\% \text{ Increase} = (100 * 15) / 120$$

You can also calculate the original price OR the new price using one of these equations.
EXAMPLE: The original price was \$150. The percent of decrease was 20%. What was the amount of decrease?

$$\frac{\text{Percent of Decrease}}{100\%} = \frac{\text{Amount of Decrease}}{\text{Original Amount}}$$

Start with the words

$$\frac{20\%}{100\%} = \frac{X}{\$150}$$

Fill in the numbers you know.

$$\frac{20\%}{100\%} = \frac{X}{\$150}$$

Calculate the amount of increase

$$\frac{20\%}{100\%} = \frac{X}{\$150}$$

Multiply the Couple

Multiply the couple & divide by the odd man out

Divide by Odd man Out

$$= (20 * 150) / 100$$

\$120 decreased price

* adapted from *Integrated 1 Mathematics, McDougal Littell, 1998*

Now, work these problems

1) Original price = \$25
New price = \$23
% increase or decrease =

2) Original price = \$.50
New price = \$.55
% increase or decrease =

3) Original price = \$140
New price = \$100
% increase or decrease =

4) Original price = \$10
New price = \$12
% increase or decrease =

5) Original price =
New price = 58.50
% decrease = 18.75 %

6) Original price = \$ 24
New price =
% decrease = 12.5%

7) Original price = \$9.60
New price = \$3.60
% decrease

8) Original price =
New price = \$723.36
% increase = 37%

9) Original price = \$32
New price =
% decrease = 18%

10) Original price =
New price = \$21.50
% decrease = $28 \frac{1}{3}$ %

11) Original price = \$6.25
New price = \$6.40
% increase =

12) Original price = \$12.50
New price = \$9.25
% decrease =