

## Percent of Change

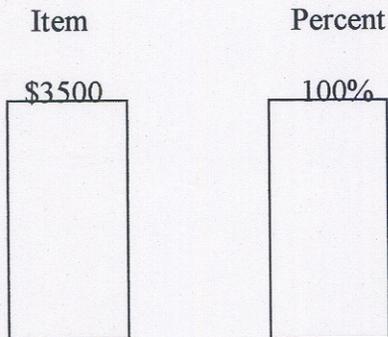
**Method one:**

Percent bars.

Original item is set at 100%. If it's an increase, raise the bar for each and the new data will be above the original items. If it's a decrease, lower the bar and the new numbers go below the original. Then, you have a visual representation that is used to set up a proportion.

**Example:**

**Find** the percent of increase when the price of a used car went from \$3500 to \$4200.



Since the price increased, draw a new section on top of each bar.

Item	Percent
\$4200	??
\$3500	100%

Now you can write a proportion to solve the problem.

$$\frac{4200}{3500} = \frac{x}{100}$$

Solve for  $x$  and you get 120%.

This is not the answer. Instead, this shows us that the percent went from 100% to 120%, which means it was a **20% increase**.

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### Method 2:

#### Formula

$$\frac{\text{change}}{\text{original}} \times 100$$

Example:

Find the percent of increase when the price of a used car went from \$3500 to \$4200.

Since the price went from \$3500 to \$4200, the change was \$700.  $\frac{700}{3500} = .2$ .

$(.2)(100) = \underline{\underline{20\% \text{ increase}}}$