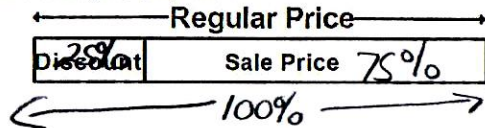


Math 7 Notes
Discount, Tax and Markup
(Lesson 2-6 & 2-7)

A discount is the amount by which the regular price is reduced. It is always calculated with the regular price as "the whole".

When you subtract the discount from the regular price, you get the sale price.

25% off means you pay 75%



A store sells items for more than they paid for those items. The amount of increase is called the markup. The percent of markup is a percent of increase. The selling price is the amount the customer pays for the item.

A \$40 necklace is on sale for 35% off. Find the sale price.

Method 1 Use the percent given in the word problem.

$\frac{\text{Dollars off}}{\text{Regular Price of Necklace}}$

$$\frac{35}{100} = \frac{n}{40}$$

$$n = \$14 \text{ off}$$

$$\begin{array}{r} 40 \\ - 14 \\ \hline \end{array}$$

\$26 Sale price

Method 2 Add or subtract the percent given in the word problem to 100%

If the necklace is discounted 35%, then the sale price is 65% of the regular price.

$$\begin{array}{r} 100\% \\ - 35\% \\ \hline 65\% \end{array}$$

$\frac{\text{Sale Price}}{\text{Reg.}}$ $\frac{65}{100} = \frac{n}{40}$

$$n = 26$$

\$26

A store buys an item for \$24. It marks it up 65% before selling it to the customer. What is the selling price of the item?

Method 1 Use the percent given in the word problem.

$\frac{\text{Amount of Markup}}{\text{Cost for the store}}$

$$\frac{65}{100} = \frac{n}{24}$$

$$n = 15.6$$

\$15.60 markup

$$\begin{array}{r} 24 \\ + 15.60 \\ \hline \end{array}$$

\$39.60

selling price

Method 2 Add or Subtract the percent given in the word problem to 100%

If the markup is 65%, then the selling price is 165% of the price of the item.

$$\frac{\text{Selling Price}}{\text{cost to store}} = \frac{165}{100} = \frac{n}{24}$$

$$n = 39.6$$

\$39.60

The Easton family bought a car for \$22,500. They must pay 6% sales tax. What is the total price of the car including tax?

Method 1 Use the percent given in the word problem.

$\frac{\text{Amount of Tax}}{\text{Price of Car}}$

$$\frac{6}{100} = \frac{n}{22500}$$

$$n = 1350 \text{ tax}$$

$$\begin{array}{r} 22500 \\ + 1350 \\ \hline \end{array}$$

\$23,850

Method 2 Add or Subtract the percent given in the word problem to 100%

If they must pay 6% tax, then the total price (including tax) is 106% of the price of the car.

$$\frac{\text{cost w/ tax}}{\text{cost of car}} = \frac{106}{100} = \frac{n}{22,500}$$

$$n = \$23,850$$