Knowing what "percent" means will help a lot.

Elementary algebra
Class notes
Percent and Mixture Problems (section 2.6)

"Percent" means "per 100" or "part of 100"

For example, 20% means "20 parts out of every 100 parts". We could write 20% as $\frac{20}{100}$ or .20 (if we do that division).

Do you remember the shortcut for turning percents into decimals?

expl 1: What number is 16% of 70?

These problems can usually be directly translated.

Percent problems compare parts to the whole. Imagine you have a whole 70 dollars or meters or frogs or whatever. And, 16% of that 70 (or 11.2 dollars, meters, frogs, etc.) would be a **part of that whole**. The trick is to figure out what is the part and what is the whole in these problems.

$$percent = part/whole$$
or
$$percent \cdot whole = part$$

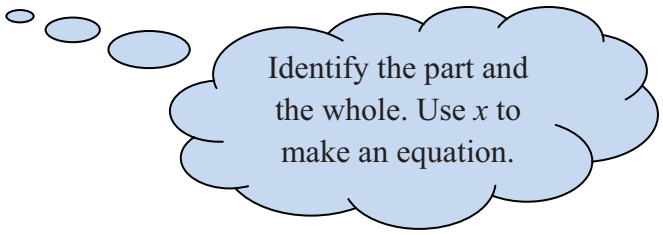
Alternatively,
$$\frac{percent\ number}{100} = \frac{part}{whole}$$

expl 2: The number 45 is 25% of what number?

Identify the part and the whole. Use x to make an equation.

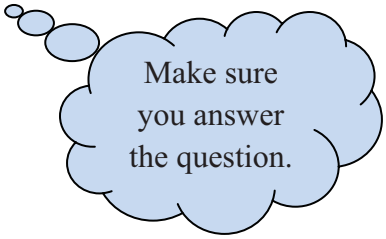
Check yourself! Does your answer make sense?

expl 3: The number 14.8 is what percent of 60?



expl 4: Solve. Round to the nearest cent.

A music store is advertising a 25%-off sale. Find the discount and sales price of a CD that sells regularly for $13.



expl 5: Solve. Round to the nearest whole percent.

The cost of attending a private college rose from $19,000 in 2000 to $22,200 in 2006. Find the percent increase.