In each problem, show what calculation you make or what equation you solve.

1 *What percentage of 60 is 24?*

Let x be the percentage in question; then

$$\frac{x}{100} \cdot 60 = 24.$$

Solving this equation,

$$x = 40.$$

So, $40\,\%$ of 60 is 24.

2 *In 2008, Todd got a \$120,000 salary. When the recession hit, his pay was cut by 15 %. What was his salary afterward?*

Todd's pay was cut by

$$\frac{15}{100} \cdot 120\,000 = 18\,000$$

dollars, so his salary afterwards was

$$120\,000 - 18\,000 = 102\,000$$

dollars, that is \$102,000.

3 *A rectangular field is divided into two squares. It takes 294 yards of fencing to enclose the field and divide it. What are the field's dimensions?*

Let x be the length in yards of any of the sides of either square; then the total amount of fencing is

$$7x = 294$$

yards. Solving this equation,

$$x = 42,$$

which is the width of the field in yards; the length of the field is $2x = 98$ yards. That is, the dimensions of the field are 42 yards by 98 yards.