

1. Decide whether the proportion  $\frac{4}{12} \stackrel{?}{=} \frac{7}{21}$  is true or false.

$$21 \cdot 4 \stackrel{?}{=} 12 \cdot 7$$

$$84 = 84 \checkmark$$

True

2. Solve the equation  $\frac{2x+8}{4} = \frac{3x-9}{3}$ .

$$3(2x+8) = 4(3x-9)$$

$$6x+24 = 12x-36$$

$$\begin{array}{r} -6x \qquad -6x \\ \hline 24 = 6x - 36 \\ +36 \qquad +36 \\ \hline 60 = 6x \\ \frac{60}{6} = \frac{6x}{6} \end{array}$$

$$10 = x$$

{10}

3. If 7 shirts cost \$87.50, find the cost of 11 shirts.

$$\frac{7 \text{ shirts}}{87.50 \text{ dollars}} = \frac{11 \text{ shirts}}{x \text{ dollars}}$$

$$7x = 962.5$$

$$x = 137.5$$

\$137.50

4. What is 26% of 480?

$$x = (0.26) \cdot (480)$$

$$x = 124.8$$

5. 18% of what number is 108?

$$0.18x = 108$$

$$x = \boxed{600}$$

6. 8 is what percent of 64?

$$8 = x \cdot 64$$

$$0.125 = x$$

$$\times 100\% \rightarrow \boxed{12.5\%}$$

7. Anna saved \$1950, which was 65% of the amount she needed for a used car. What was the total amount she needed for the car?

65% of what is \$1950

$$0.65x = 1950$$

$$x = 3000$$

**She needed \$3000 for her car.**