

Solving Proportions

Solve each equation.

$$1) \frac{7}{8} = \frac{m}{12}$$

$$8 \cdot m = 7 \cdot 12$$

$$\frac{8m}{8} = \frac{84}{8}$$

$$m = 10.5$$

$$2) \frac{b-8}{5} = \frac{b+3}{4}$$

$$4(b-8) = 5(b+3)$$

$$4b - 32 = 5b + 15$$

$$\begin{array}{r} -4b \quad -4b \\ \hline \end{array}$$

$$-32 = b + 15$$

$$\begin{array}{r} -15 \quad -15 \\ \hline \end{array}$$

$$-47 = b$$

- 3) 8 oz of orange juice contains 97 mg of vitamin C.
How many mg of vitamin C in 12 oz?

$$\frac{8 \text{ oz}}{97 \text{ mg}} = \frac{12 \text{ oz}}{x \text{ mg}}$$

$$\frac{8x}{8} = \frac{1,164}{8}$$

$$x = 145.5 \text{ mg}$$