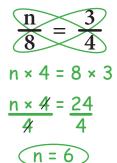
Name:

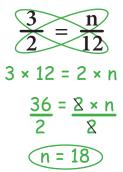
Date:

Proportions

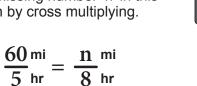
Find the missing number 'n' by cross multiplying.



Find the missing number 'n' by cross multiplying.



Find the missing number 'n' in this proportion by cross multiplying.



A factory makes 12 bikes in 3 hours. If it keeps making bikes at the same rate, how many bikes will it have made in 8 hours? (hint: set up a proportion.)



$$5 \text{ hr} = 8 \text{ hr}$$

$$60 \times 8 = 5 \times n$$

$$\frac{480}{5} = \frac{\cancel{5} \times n}{\cancel{5}}$$

$$\boxed{n = 96 \text{ mi}}$$

 $\frac{12}{3}$ bikes $\frac{n}{8}$ hrs $12 \times 8 = 3 \times n$ $\frac{96}{3} = \frac{3 \times n}{3}$ (n = 32 bikes)

If it takes 2 cups of flour to make 45 cookies, how many cups of flour will it take to make 135 cookies? (hint: set up a proportion.)



On a map, two cities measure 6.2 cm apart. If the scale of the map is 5 cm per 10 miles, then how many miles apart are the cities? (hint: set up a proportion.)



$$\frac{2 \text{ cups}}{45 \text{ cookies}} = \frac{n}{135} \frac{\text{cups}}{\text{cookies}}$$

$$2 \times 135 = n \times 45$$

$$\frac{270}{45} = \frac{n \times 45}{45}$$

(n = 6 cups)

$$\frac{5}{10} \frac{cm}{mi} = \frac{6.2}{n} \frac{cm}{mi}$$

$$5 \times n = 10 \times 6.2$$

$$\frac{\cancel{5} \times n}{\cancel{5}} = \frac{62}{5}$$

$$n = 12.4 \text{ mi}$$