

## Lesson 2-6

## Example 1

Write each ratio as a fraction in lowest terms.

a. 15 gal to 75 gal

b. 3 min : 80 sec

c. 750 m to 2 km

## Solution

Convert one of the quantities if necessary so that both terms of the ratio are in the same unit of measure.

a.  $\frac{15}{75} = \frac{1}{5}$

b.  $\frac{180}{80} = \frac{9}{4}$

c.  $\frac{750}{2000} = \frac{3}{8}$

## Example 2

Find an equivalent ratio.

a. 5 to 6

b. 48 : 88

c.  $\frac{12}{5}$

## Solution

Write the ratio as a fraction. The solution will depend on the number by which you choose to multiply or divide.

a.  $\frac{5}{6} = \frac{5 \cdot 3}{6 \cdot 3} = \frac{15}{18}$

b.  $\frac{48}{88} = \frac{48 \div 8}{88 \div 8} = \frac{6}{11}$

c.  $\frac{12}{5} = \frac{12 \cdot 2}{5 \cdot 2} = \frac{24}{10}$

**Example 3**

**HOME IMPROVEMENT** Angile wants to buy paint in an “off-white” custom color that is made by mixing 2 parts of yellow paint to 5 parts of white paint. What is the ratio of yellow paint to white paint? How much yellow paint should she mix with 25 pt of white paint?

**Solution**

The ratio is  $\frac{2}{5}$ . For each additional 5 pt of white paint, Angile needs an additional 2 pt of yellow paint. Use this pattern to make a table. Extend the table to 25 pt of white paint.

<b>Pints of yellow paint</b>	2	4	6	8	10
<b>Pints of white paint</b>	5	10	15	20	25

Angile should mix 10 pt of yellow paint with 25 pt of white paint.