Reteach

Ratios

A **ratio** is a comparison of two numbers by division. A common way to express a ratio is as a fraction in simplest form. Ratios can also be written in other ways. For example, the ratio $\frac{2}{3}$ can be written as 2 to 3, 2 out of 3, or 2:3.

Examples

Refer to the diagram at the right.

1. Write the ratio in simplest form that compares the number of circles to the number of triangles.

$$\begin{array}{c} \text{circles} \to \\ \text{triangles} \to \end{array} \frac{4}{5} \qquad \text{The GCF of 4 and 5 is 1.}$$

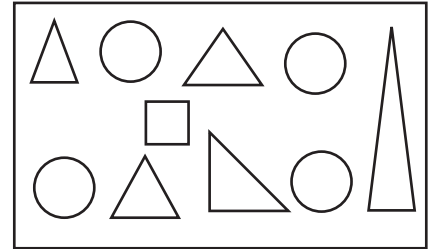So, the ratio of circles to triangles is $\frac{4}{5}$, 4 to 5, or 4:5.

For every 4 circles, there are 5 triangles.

2. Write the ratio in simplest form that compares the number of circles to the total number of figures.

$$\begin{array}{c} \text{circles} \to \\ \text{total figures} \to \end{array} \overset{\div 2}{\underset{\div 2}{\frac{4}{10}}} = \frac{2}{5} \qquad \text{The GCF of 4 and 10 is 2.}$$

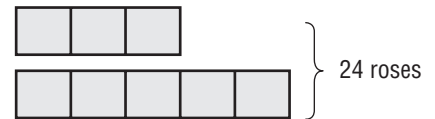The ratio of circles to the total number of figures is $\frac{2}{5}$, 2 to 5, or 2:5.
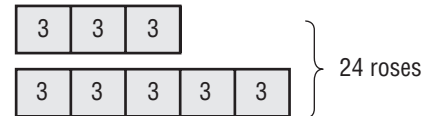For every two circles, there are five total figures.

Example 3

Divide 24 roses into 2 groups so the ratio is 3 to 5.

Use a bar diagram. Show a group of 3
and a group of 5.

Because there are 8 sections, each section
represents 24 ÷ 8, or 3 roses.

There are 9 roses in the first group and 15 roses in the second group.

Exercises

Write each ratio as a fraction in simplest form. Then explain its meaning.

1. 2 guppies to 6 seahorses

2. 12 puppies to 15 kittens

3. **SPELLING** A sentence has 5 misspelled words and 15 correctly spelled words. Find the ratio of misspelled words to correctly spelled words.