

LESSON
6-1**Ratios****Reteach**

A ratio is a comparison of two quantities by division.

To compare the number of times vowels are used to the number of times consonants are used in the word "mathematics," first find each quantity.

Number of times vowels are used: 4

Number of times consonants are used: 7

Then write the comparison as a ratio, using the quantities in the same order as they appear in the word expression. There are three ways to write a ratio.

$$\frac{4}{7} \qquad 4 \text{ to } 7 \qquad 4:7$$

Write each ratio.

1. days in May to days in a year

2. sides of a triangle to sides of a square

Equivalent ratios are ratios that name the same comparison.

The ratio of inches in a foot to inches in a yard is $\frac{12}{36}$. To find equivalent ratios, divide or multiply the numerator and denominator by the same number.

$$\frac{12}{36} = \frac{12 \div 3}{36 \div 3} = \frac{4}{12} \qquad \frac{12}{36} = \frac{12 \cdot 2}{36 \cdot 2} = \frac{24}{72}$$

So, $\frac{12}{36}$, $\frac{4}{12}$, and $\frac{24}{72}$ are equivalent ratios.

Write three equivalent ratios to compare each of the following.

3. 8 triangles to 12 circles

4. 20 pencils to 25 erasers

5. 5 girls to 6 boys

6. 10 pants to 14 shirts
