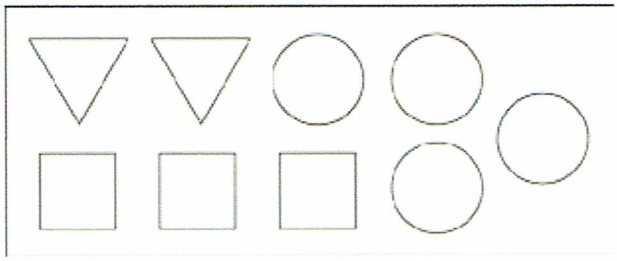
Name _____ Date _____ Class _____

LESSON 1

Proportional Relationships

Reading Strategies: Use the Context

A **ratio** is a comparison between two similar quantities. The picture below shows geometric figures. You can write ratios to compare the figures.



Compare the number of triangles to the total number of figures. This comparison can be written as a ratio in three different ways.

$\frac{\text{number of triangles}}{\text{total figures}} \longrightarrow \frac{2}{9}$ Read: "two to nine."

2 to 9

2:9 Read: "two to nine."

Compare the number of squares to the number of circles.

1. Write the ratio that compares the number of squares to the number of circles in three different ways.

A **rate** compares two different kinds of quantities. Rates can be shown in different ways.

You can buy 3 cans of juice for $4. The comparison of juice to money can be written:

$\frac{3 \text{ cans}}{\$4} \longrightarrow \frac{3}{4}$ 3 to 4 3:4

Julie can jog eight miles in two hours. Use this information to complete Exercises 2–4.

2. Write the rate using words. _____

3. Write the rate with numbers in three different ways.

4. Compare ratios and rates. How are they alike?