

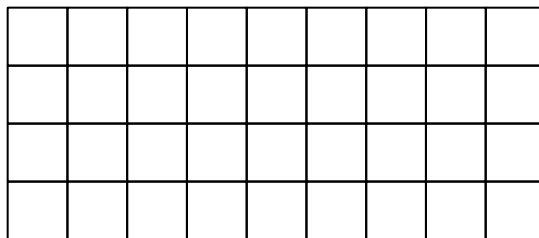
**Lesson Summary**

Two ratios  $A:B$  and  $C:D$  are *equivalent ratios* if there is a nonzero number  $c$  such that  $C = cA$  and  $D = cB$ . For example, two ratios are equivalent if they both have values that are equal.

Ratios are equivalent if there is a nonzero number that can be multiplied by both quantities in one ratio to equal the corresponding quantities in the second ratio.

**Problem Set**

1. Write two ratios that are equivalent to 1:1.
2. Write two ratios that are equivalent to 3:11.
3.
  - a. The ratio of the width of the rectangle to the height of the rectangle is \_\_\_\_\_ to \_\_\_\_\_.



- b. If each square in the grid has a side length of 8 mm, what is the width and height of the rectangle?
4. For a project in their health class, Jasmine and Brenda recorded the amount of milk they drank every day. Jasmine drank 2 pints of milk each day, and Brenda drank 3 pints of milk each day.
  - a. Write a ratio of the number of pints of milk Jasmine drank to the number of pints of milk Brenda drank each day.
  - b. Represent this scenario with tape diagrams.
  - c. If one pint of milk is equivalent to 2 cups of milk, how many cups of milk did Jasmine and Brenda each drink? How do you know?
  - d. Write a ratio of the number of cups of milk Jasmine drank to the number of cups of milk Brenda drank.
  - e. Are the two ratios you determined equivalent? Explain why or why not.