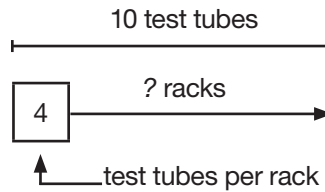# Problem Solving: Draw a Picture and Write an Equation

Mr. Rodriguez needs to store 10 test tubes in racks that hold 4 test tubes apiece. How many racks does he need?

Draw a picture.

10 test tubes

| 4 | ? racks |

test tubes per rack

Write an equation.

Let r be the number of test-tube racks needed.

$10 \div 4 = r$

Solve the problem.　　　　$r = 2$ R 2

Think: R 2 means that 2 test tubes are still left. Since they must be in a rack, one more rack is needed.

Write the answer in a complete sentence.

Mr. Rodriguez will need three test-tube racks.

Mr. Rodriguez could also use racks that hold three test tubes or racks that hold five test tubes. Which racks should he use if he wants each rack completely filled? Explain.

_____

_____

Problem Solving: Draw a Picture and Write an Equation

Draw a picture and write an equation. Then solve.

1. Tommy paid $39 to fill up the gas tank in his car. If one gallon of gas costs $3, how many gallons of gas did Tommy put in?

   _____

   _____

2. To prepare for the brunch, Ivana needs to place 8 muffins in each basket. If she has 115 muffins, how many baskets will she need?

   _____

   _____

3. Write a real-world problem that you can solve by writing an equation. The answer to the problem must be 6.

   _____

   _____

4. The perimeter is the distance around an object. The perimeter of a square is 84 centimeters. What is the length of one side of the square?

   A 75 cm   **B** 42 cm   **C** 21 cm   **D** 14 cm

5. **Writing to Explain** A perfect score on a quiz is 100. Mrs. Frisoli gives students 1 point for putting their name on the paper. If there are only 9 questions on the quiz, how much is each question worth? Explain how you found your answer.

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