

Name \_\_\_\_\_

# Problem Solving: Act It Out and Use Reasoning

1. Christina collects stamps. She has 47 stamps in all. She has 20 stamps from Europe. The number of African stamps is 2 times the number of Asian stamps. How many stamps from each of these three continents does she have?

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2. Write a problem that can be solved by acting it out and using reasoning.

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3. A public pool opened for the summer. A total of 246 people came swimming over the first 3 days it was open. On the first day, 79 came to swim. On the second day, 104 people swam. How many people swam on the third day?

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4. Marissa earned \$480 in the summer. If she earned \$40 a week, how many weeks did she work?

**A** 48                      **B** 12                      **C** 10                      **D** 9

5. How could you use cubes to act out a problem?

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Name \_\_\_\_\_

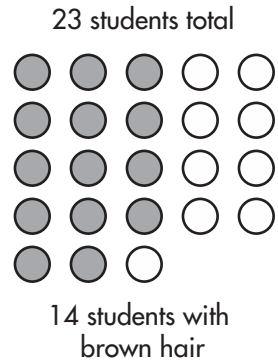
# Problem Solving: Act It Out and Use Reasoning

In Mackenzie's class there are 23 students. 14 students have brown hair. 2 times as many students have blonde hair as have red hair. How many students have each color hair?

Draw a diagram to show what you know.

There are 9 students left. You know that two times as many have blonde hair as have red hair. Make a table to try different numbers and see which pair fits the problem.

red		blonde	Do numbers add up to 9?
1	$1 \times 2 =$	2	does not equal 9
2	$2 \times 2 =$	4	does not equal 9
3	$3 \times 2 =$	6	equals 9



Since  $6 = 2 \times 3$  and  $6 + 3 = 9$ , this is the correct answer.

So, in Mackenzie's class, there are 14 students with brown hair, 6 with blonde hair, and 3 with red hair.

In **1** and **2**, solve. Draw a picture and/or table to help find the answer.

1. Jacobson Animal Shelter has half as many cats as dogs. The shelter has 30 dogs. How many total animals does the shelter have?

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2. Summer's mother gave Summer \$20 to share with her 3 brothers equally. How much did each person get?

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