Name _____ Date _____

Skills Maintenance
Using Variables

Activity 1

Substitute the correct value for the variable in each of the problems.

1. $x + 7 = 25$ $x =$ _____

2. $43 + b = 125$ $b =$ _____

3. $18 \div z = 3$ $z =$ _____

4. $c \div 9 = 7$ $c =$ _____

5. $400 - 300 = y$ $y =$ _____

6. $197 - a = 2$ $a =$ _____

Activity 2

Substitute the values for the variables and solve.

1. What is the value of $n + 1$ if $n = 7$? _____

2. If $2 + x = 8$, what is the value of x? _____

3. What is the value of $4 + y$ if $y = 18$? _____

4. Solve $n - 8$ if $n = 17$. _____
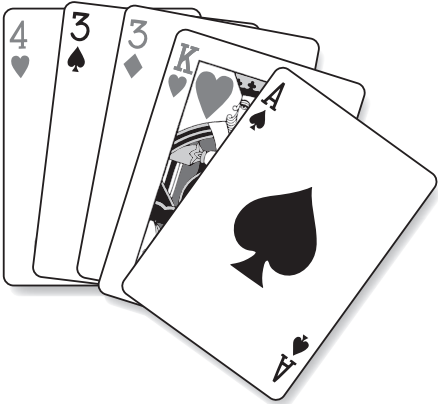
5. If $z = 25$, solve $z \div 5$. _____

6. What is the value of $m \div 9$ if $m = 81$? _____

Name _____ Date _____

%÷ Apply Skills
=< x Ratios

Activity 1

Use three methods for writing ratios based on the hand of five cards.

1. What is the ratio of hearts to diamonds?

   _____ hearts to _____ diamonds

   _____ _____

2. What is the ratio of spades to the entire hand?

   _____ spades to _____ entire hand

   _____ _____

3. What is the ratio of 3s to the entire hand?

   _____ 3s to _____ entire hand

   _____ _____

4. What is the ratio of 3s to 7s in this hand?

   _____ 3s to _____ 7s

   _____ _____

5. What is the ratio of clubs to the entire hand?

   _____ clubs to _____ entire hand

   _____ _____

6. Explain why it's important to label the things you are comparing in the ratios.

   _____

   _____

   _____

Name _____ Date _____

Problem-Solving Activity
Word Problems With Ratios

Now it is your turn to solve some ratio word problems. Remember to start with the labels. This will tell you what numbers to look for in the problem. If the numbers are not there, you will need to compute them. Then connect the labels with the numbers and write the answer as a ratio.

1. Your math class has 27 students. There are 12 seniors and the rest are juniors. What is the senior-to-junior ratio?

    _____

2. The football team has 12 wins and 6 losses. What is the win-to-loss ratio?

    _____

3. There are 3 bird owners, 4 cat owners, and 2 dog owners in a complex of 18 apartments. All other owners have no pets. What is the bird-owner to cat-owner ratio?

    _____

4. If there are 300 students in the sophomore class and 180 of them are girls, what is the boy-to-girl ratio?

    _____

5. If the recipe calls for 1 cup sugar and 2 eggs, what is the sugar-to-egg ratio?

    _____

6. Suppose you are dealt 5 hearts, 3 diamonds, 1 spade, and 1 club. What is the ratio of hearts to the entire hand of cards?

    _____

mBook Reinforce Understanding
Use the mBook *Study Guide* to review lesson concepts.