

Name _____ Date _____

**Skills Maintenance****Basic Facts With Variables****Activity 1**

Solve the basic facts. Write the answer above the variable.

1. $4 + 7 = m$

2. $x - 6 = 9$

3. $y \cdot 4 = 36$

4. $8 \div s = 2$

5. $7 \cdot t = 42$

6. $z + 8 = 17$

7. $15 - 7 = k$

8. $b \div 9 = 9$

9. $h \cdot 9 = 27$

10. $7 + 7 = v$

11. $w \cdot 8 = 32$

12. $18 - 9 = d$

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 **Apply Skills**
Substitution**Activity 1**

Substitute the value for the variable that makes each statement true.

1. What is the value of x in $x + 12 = 17$? $x =$ _____
2. What is the value of a in $a \cdot 7 = 56$? $a =$ _____
3. What is the value of b in $45 \div 9 = b$? $b =$ _____
4. What is the value of z in $27 - z = 18$? $z =$ _____
5. What is the value of w in $39 + 47 = w$? $w =$ _____
6. What is the value of d in $d - 25 = 25$? $d =$ _____
7. What is the value of y in $5 \cdot y = 35$? $y =$ _____

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Activity 2

Substitute values for the variables in the general statements and tell if the statements are true or false.

1. $x + y + z = y + z + x$ Substitute $x = 5, y = 6$ and $z = 10$.

$$\begin{array}{ccccccccccc}
 x & + & y & + & z & = & y & + & z & + & x \\
 \downarrow & & \downarrow & & \downarrow & & \downarrow & & \downarrow & & \downarrow \\
 \underline{\hspace{1cm}} & + & \underline{\hspace{1cm}} & + & \underline{\hspace{1cm}} & = & \underline{\hspace{1cm}} & + & \underline{\hspace{1cm}} & + & \underline{\hspace{1cm}}
 \end{array}$$

Is the statement true or false? _____

2. $x \cdot y \cdot z = z \cdot x \cdot y$ Substitute $x = 5, y = 6$ and $z = 10$.

$$\begin{array}{ccccccccccc}
 x & \cdot & y & \cdot & z & = & z & \cdot & x & \cdot & y \\
 \downarrow & & \downarrow & & \downarrow & & \downarrow & & \downarrow & & \downarrow \\
 \underline{\hspace{1cm}} & \cdot & \underline{\hspace{1cm}} & \cdot & \underline{\hspace{1cm}} & = & \underline{\hspace{1cm}} & \cdot & \underline{\hspace{1cm}} & \cdot & \underline{\hspace{1cm}}
 \end{array}$$

Is the statement true or false? _____

3. $w \cdot 0 = w$ Substitute $w = 12$.

$$\begin{array}{ccccccc}
 w & \cdot & 0 & = & w \\
 \downarrow & & \downarrow & & \downarrow \\
 \underline{\hspace{1cm}} & \cdot & 0 & = & \underline{\hspace{1cm}}
 \end{array}$$

Is the statement true or false? _____

4. $0 + d = 0$ Substitute $d = \frac{3}{4}$.

$$\begin{array}{ccccccc}
 0 & + & d & = & 0 \\
 & & \downarrow & & \downarrow \\
 0 & + & \underline{\hspace{1cm}} & = & 0
 \end{array}$$

Is the statement true or false? _____

5. $0 \cdot g = 0$ Substitute $g = 2.7$.

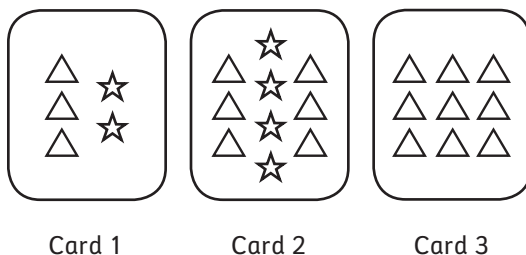
$$\begin{array}{ccccccc}
 0 & \cdot & g & = & 0 \\
 & & \downarrow & & \\
 0 & \cdot & \underline{\hspace{1cm}} & = & 0
 \end{array}$$

Is the statement true or false? _____

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 **Problem-Solving Activity**
Pattern Cards

Look at the set of pattern cards. Cards 1 and 2 have stars and triangles, but Card 3 has only triangles. Analyze the pattern in Cards 1 and 2 and tell how many stars there should be on Card 3. Then answer the questions.



1. What is the general pattern? _____
2. How many stars should go in Card 3? _____
3. How did you solve the problem?

4. Suppose you were asked to draw Card 4. Use the general pattern and substitution to demonstrate what Card 4 will look like.

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