



Name \_\_\_\_\_ Date \_\_\_\_\_ Pd \_\_\_\_\_

## 1-8 Properties (pp. 53-56)

Name the property shown by each statement.

\_\_\_\_\_ 14)  $9 \times 7 = 7 \times 9$

\_\_\_\_\_ 15)  $3(9 - 7) = 3 \times 9 - 3 \times 7$

\_\_\_\_\_ 16)  $2b + 0 = 2b$

\_\_\_\_\_ 17)  $2 \times (8 \times 5) = (2 \times 8) \times 5$

\_\_\_\_\_ 18)  $1 \times 87 = 87$

\_\_\_\_\_ 19)  $5(w + 1) = (w + 1)5$

\_\_\_\_\_ 20)  $4(d + f) = 4(f + d)$

\_\_\_\_\_ 21)  $(6 \times 8)2 = 6(8 \times 2)$

\_\_\_\_\_ 22)  $r + 6 = 6 + r$

\_\_\_\_\_ 23)  $(4 + 3) + 6 = 4 + (3 + 6)$

Use the Distributive Property (SHARE!!!) to *write* each expression as an equivalent expression.

24)  $4(5 + 7) =$  \_\_\_\_\_

25)  $8(a + m) =$  \_\_\_\_\_

26)  $3(9 - 6) =$  \_\_\_\_\_

27)  $7(y - z) =$  \_\_\_\_\_

Use the Distributive Property to fill in each missing blank.

28)  $42y - 42w = 42(\text{---} - \text{---})$

29)  $2(3) + 2(5) = \text{---}(3 + 5)$

## 1-10 Equations and Functions (pp. 57-61)

Complete each function table. Show your work ☺

30)  $y = 4x$

$x$		$y$
5		
6		
7		
8		

31)  $y = 2x - 1$

$x$		$y$
4		
10		
15		
25		

**FINALLY  
DONE**



# Chapter 1.2 Answer Key B.I.T

(Variables & Expressions, Properties, Equations & Functions)

## Vocabulary Check

Word Bank		
variable	algebraic expression	equation
solution	function	numerical expression

Choose from the terms above to complete each sentence.

- 1) A(n) **algebraic expression** contains variables, numbers, and at least one operation.
- 2) A(n) **equation** is a mathematical sentence that contains an equal sign.
- 3) A relationship in which each input value results in exactly one output value is called a(n) **function**.

Define the following vocabulary words:

- 4) Properties: **Statements that are true for all numbers.**
- 5) Variable: **A symbol (or letter) that represents a number**

## 1-6 Variables and Expressions (pp. 44-47)

Evaluate each expression if  $a = 10$ ,  $b = 4$  and  $c = 8$ . Show your work 😊

$$6) (a - b)^2$$

$$(10 - 4)^2$$

$$6^2$$

**36**

$$7) ab \div c$$

$$10 \times 4 \div 8$$

$$40 \div 8$$

**5**

$$8) 3b^2 + c$$

$$3 \times 4^2 + 8$$

$$3 \times 16 + 8$$

$$48 + 8$$

**56**

$$9) \frac{(b + c)^2}{3}$$

$$\frac{(4 + 8)^2}{3}$$

$$\frac{12^2}{3}$$

$$\frac{144}{3}$$

**48**

Name \_\_\_\_\_ Date \_\_\_\_\_ Pd \_\_\_\_\_

Evaluate each expression if  $r = 5$  and  $s = 6$ . Show your work 😊

10)  $2r + 3s$   
 $2 \times 5 + 3 \times 6$   
 $10 + 3 \times 6$   
 $10 + 18$

**28**

12)  $rs \div 5$   
 $5 \times 6 \div 5$   
 $30 \div 5$

**6**

11)  $r^2 - 3s$   
 $5^2 - 3 \times 6$   
 $25 - 3 \times 6$   
 $25 - 18$

**7**

13)  $r^3 s^2$   
 $5^3 6^2$   
 $125 \times 6^2$   
 $125 \times 36$

**4,500**

### 1-8 Properties (pp. 53-56)

Name the property shown by each statement.

- |           |                               |           |   |
|-----------|-------------------------------|-----------|---|
| <u>CM</u> | 14) $9 \times 7 = 7 \times 9$ | <u>D</u>  | 15) $3(9 - 7) = 3 \times 9 - 3 \times 7$            |
| <u>IA</u> | 16) $2b + 0 = 2b$             | <u>AM</u> | 17) $2 \times (8 \times 5) = (2 \times 8) \times 5$ |
| <u>IM</u> | 18) $1 \times 87 = 87$        | <u>CM</u> | 19) $5(w + 1) = (w + 1)5$                           |
| <u>CA</u> | 20) $4(d + f) = 4(f + d)$     | <u>AM</u> | 21) $(6 \times 8)2 = 6(8 \times 2)$                 |
| <u>CA</u> | 22) $r + 6 = 6 + r$           | <u>AA</u> | 23) $(4 + 3) + 6 = 4 + (3 + 6)$                     |

Use the Distributive Property (SHARE!!!) to write each expression as an equivalent expression.

- 24)  $4(5 + 7) = \underline{4(5) + 4(7)}$  or  $\underline{4 \times 5 + 4 \times 7}$     25)  $8(a + m) = \underline{8a + 8m}$
- 26)  $3(9 - 6) = \underline{3(9) - 3(6)}$  or  $\underline{3 \times 9 - 3 \times 6}$     27)  $7(y - z) = \underline{7y - 7z}$

Use the Distributive Property to fill in each missing blank.

- 28)  $42y - 42w = 42(\underline{y} - \underline{w})$                       29)  $2(3) + 2(5) = \underline{2}(3 + 5)$

### 1-10 Equations and Functions (pp. 57-61)

Complete each function table. Show your work ☺

30)  $y = 4x$

$x$	$4x$	$y$
5	$4(5)$	20
6	$4(6)$	24
7	$4(7)$	28
8	$4(8)$	32

31)  $y = 2x - 1$

$x$	$2x - 1$	$y$
4	$2(4) - 1$ $8 - 1$	7
10	$2(10) - 1$ $20 - 1$	19
15	$2(15) - 1$ $30 - 1$	29
25	$2(25) - 1$ $50 - 1$	49



FINALLY DONE