

Name: \_\_\_\_\_

Class: \_\_\_\_\_

Homework # \_\_\_\_\_

Date: \_\_\_\_\_

**Directions: State the property that is demonstrated in each.**

1)  $3 \times (8 \times 4) = (3 \times 8) \times 4$

\_\_\_\_\_

2)  $8 \times 7 = 7 \times 8$

\_\_\_\_\_

3)  $4 + 7 = 7 + 4$

\_\_\_\_\_

4)  $5 + 0 = 5$

\_\_\_\_\_

5)  $15 + (-15) = 0$

\_\_\_\_\_

6)  $5(4 + 7) = 5(4) + 5(7)$

\_\_\_\_\_

7)  $15 \times \frac{1}{15} = 1$

\_\_\_\_\_

8)  $10 \times 1 = 10$

\_\_\_\_\_

9)  $4(x - 5) = 4x - 20$

\_\_\_\_\_

10)  $5 + (6 + 7) = (5 + 6) + 7$

\_\_\_\_\_

11)  $(10 + y)7 = 70 + 7y$

\_\_\_\_\_

12)  $13 \times 2 = 2 \times 13$

\_\_\_\_\_

13)  $-10 + 10 = 0$

\_\_\_\_\_

Name : \_\_\_\_\_

Score : \_\_\_\_\_

Teacher : \_\_\_\_\_

Date : \_\_\_\_\_

### Identify the Properties of Mathematics

- 1 ) The sum of any number and zero is the original number. For example  $a + 0 = a$ . \_\_\_\_\_
- 2 ) When two numbers are added, the sum is the same regardless of the order of the addends. For example  $a + b = b + a$  \_\_\_\_\_
- 3 ) When two numbers are added, the sum is the same regardless of the order of the addends. For example  $a + b = b + a$  \_\_\_\_\_
- 4 ) Adding 0 to any number leaves it unchanged. For example  $a + 0 = a$ . \_\_\_\_\_
- 5 ) When two numbers are multiplied together, the product is the same regardless of the order of the multiplicands. For example  $a \times b = b \times a$  \_\_\_\_\_
- 6 ) When two numbers are multiplied together, the product is the same regardless of the order of the multiplicands. For example  $a \times b = b \times a$  \_\_\_\_\_
- 7 ) When three or more numbers are multiplied, the product is the same regardless of the order of the multiplicands. For example  $(a \times b) \times c = a \times (b \times c)$  \_\_\_\_\_
- 8 ) The additive inverse of a number, a is -a so that  $a + -a = 0$ . \_\_\_\_\_
- 9 ) Adding 0 to any number leaves it unchanged. For example  $a + 0 = a$ . \_\_\_\_\_
- 10 ) The multiplicative inverse of a number, a is  $\frac{1}{a}$  so that  $a \times \frac{1}{a} = 1$ . \_\_\_\_\_
- 11 ) The additive inverse of a number, a is -a so that  $a + -a = 0$ . \_\_\_\_\_
- 12 ) When three or more numbers are multiplied, the product is the same regardless of the order of the multiplicands. For example  $(a \times b) \times c = a \times (b \times c)$  \_\_\_\_\_

