

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

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

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

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

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### Identify the Properties of Mathematics

- 1 ) The equals sign in an equation is like a scale: both sides, left and right, must be the same in order for the scale to stay in balance and the equation to be true. \_\_\_\_\_
- 2 ) When two numbers are multiplied together, the product is the same regardless of the order of the multiplicands. For example  $a \times b = b \times a$  \_\_\_\_\_
- 3 ) When three or more numbers are added, the sum is the same regardless of the grouping of the addends. For example  $(a + b) + c = a + (b + c)$  \_\_\_\_\_
- 4 ) What Property is illustrated by this statement: if  $a = b$  and  $b = c$ , then  $a = c$ . \_\_\_\_\_
- 5 ) The equals sign is like a mirror, and the image it "reflects" is the same as the original. if  $a = a$ : anything is congruent to itself. \_\_\_\_\_
- 6 ) When three or more numbers are multiplied, the product is the same regardless of the order of the multiplicands. For example  $(a \times b) \times c = a \times (b \times c)$  \_\_\_\_\_
- 7 ) The sum of two numbers times a third number is equal to the sum of each addend times the third number. For example  $a \times (b + c) = a \times b + a \times c$  \_\_\_\_\_
- 8 ) When two numbers are multiplied together, the product is the same regardless of the order of the multiplicands. For example  $a \times b = b \times a$  \_\_\_\_\_
- 9 ) The sum of two numbers times a third number is equal to the sum of each addend times the third number. For example  $a \times (b + c) = a \times b + a \times c$  \_\_\_\_\_
- 10 ) The additive inverse of a number,  $a$  is  $-a$  so that  $a + -a = 0$ . \_\_\_\_\_
- 11 ) When three or more numbers are multiplied, the product is the same regardless of the order of the multiplicands. For example  $(a \times b) \times c = a \times (b \times c)$  \_\_\_\_\_
- 12 ) What Property is illustrated by this statement: if  $a = b$  and  $b = c$ , then  $a = c$ . \_\_\_\_\_
- 13 ) When two numbers are added, the sum is the same regardless of the order of the addends. For example  $a + b = b + a$  \_\_\_\_\_
- 14 ) The equals sign in an equation is like a scale: both sides, left and right, must be the same in order for the scale to stay in balance and the equation to be true. \_\_\_\_\_
- 15 ) The additive inverse of a number,  $a$  is  $-a$  so that  $a + -a = 0$ . \_\_\_\_\_