

Name : _____

Score : _____

Teacher : _____

Date : _____

Identify the Properties of Mathematics

- 1) The product of any number and one is that number. For example $a \times 1 = a$. _____
- 2) Adding 0 to any number leaves it unchanged. For example $a + 0 = a$. _____
- 3) If you subtract the same number from both sides of an equation, the equation is still true. For example if $a = b$, then $a - c = b - c$. _____
- 4) When three or more numbers are multiplied, the product is the same regardless of the order of the multiplicands. For example $(a \times b) \times c = a \times (b \times c)$ _____
- 5) When three or more numbers are added, the sum is the same regardless of the grouping of the addends. For example $(a + b) + c = a + (b + c)$ _____
- 6) If you add the same number to both sides of an equation, the equation is still true. For example if $a = b$, then $a + c = b + c$. _____
- 7) Multiplying any number by 0 yields 0. For example $a \times 0 = 0$. _____
- 8) If you divide the same number to both sides of an equation, the equation is still true. For example if $a = b$, then $a \div c = b \div c$. _____
- 9) If you multiply the same number to both sides of an equation, the equation is still true. For example if $a = b$, then $a \times c = b \times c$. _____
- 10) The sum of two numbers times a third number is equal to the sum of each addend times the third number. For example $a \times (b + c) = a \times b + a \times c$ _____
- 11) The multiplicative inverse of a number, a is $\frac{1}{a}$ so that $a \times \frac{1}{a} = 1$. _____
- 12) When two numbers are added, the sum is the same regardless of the order of the addends. For example $a + b = b + a$ _____
- 13) The sum of any number and zero is the original number. For example $a + 0 = a$. _____
- 14) When two numbers are multiplied together, the product is the same regardless of the order of the multiplicands. For example $a \times b = b \times a$ _____
- 15) The additive inverse of a number, a is $-a$ so that $a + -a = 0$. _____

