

Identify the Properties of Mathematics

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