Properties of Real Numbers

Let a, b, and c be real numbers, variables, or algebraic expressions.

Property	Example
1. Commutative Property of Addition $+ (\quad) = a$	$+ 2$
2. Commutative Property of Multiplication $* \quad = \quad *$	$2 * (3) = 3 * (2)$
3. Associative property of Addition $+ (\quad + \quad) = (\quad + \quad) +$	$2+(3+4)=(2+3)+4$
4. Associative Property of Multiplication $* (\quad * \quad) = (\quad * \quad) *$	$2 * (3 * 4) = (2 * 3) * 4$
5. Distributive Property $* (\quad + \quad) = \quad * \quad + \quad *$	$2 * (3 + 4) = 2 * 3 + 2 * 4$
6. Additive Identity Property $+ 0 =$	$3 + 0 = 3$
7. Multiplicative Identity Property $* 1 =$	$3 * 1 = 3$
8. Additive Inverse Property $+ (-) = a$	3