

PROPERTIES

<i>PROPERTY</i>	<i>EXPLANATION</i>	<i>EXAMPLE</i>
Distributive Property	$a(b + c) = a(b) + a(c)$	$5(3 + 4) = 5(3) + 5(4)$
Commutative Property of Addition	$a + b = b + a$	$6 + 3 = 3 + 6$ $9 = 9$
Commutative Property of Multiplication	$a \times b = b \times a$	$4 \times 5 = 5 \times 4$ $20 = 20$
Associative Property of Addition	$(a + b) + c = a + (b + c)$	$(3 + 4) + 7 = 3 + (4 + 7)$ $14 = 14$
Associative Property of Multiplication	$(a \times b) \times c = a \times (b \times c)$	$(2 \times 5) \times 8 = 2 \times (5 \times 8)$ $80 = 80$
Identity Property of Addition	$a + 0 = a$	$5 + 0 = 5$
Identity Property of Multiplication	$a \times 1 = a$	$5 \times 1 = 5$
Multiplicative Property of Zero	$a \times 0 = 0$ $0 \times a = 0$	$15 \times 0 = 0$ $0 \times 15 = 0$