

COMMON ARITHMETIC PROPERTIES

Property	Additive	Multiplicative
Associative	$a + (b + c) = (a + b) + c$	$a(bc) = (ab)c$
Commutative	$a + b = b + a$	$ab = ba$
Distributive	N/A	$a(b+c) = ab + ac$
Identity	$0 + a = a$	$1a = a$
Inverse	$a + (-a) = 0$	$a\left(\frac{1}{a}\right) = 1$ Note: $a \neq 0$