Notes:

Distribution Property

The process of distributing the number on the outside of the parentheses to each term on the inside.

a(b + c) = ab + ac and (b + c) a = ba + ca

a(b - c) = ab - ac and (b - c) a = ba - ca

Example #1

5(x + 7)

5 • x + 5 • 7

5x + 35

Commutative Property

Commutative means that the ***order*** does not make any difference.

a + b = b + a a • b = b • a

Examples

4 + 5 = 5 + 4

2 • 3 = 3 • 2

The commutative property does not work for subtraction or division.

Associative Property

Associative means that the ***grouping*** does not make any difference.

(a + b) + c = a + (b + c) (ab) c = a (bc)

Examples

(1 + 2) + 3 = 1 + (2 + 3)

(2 • 3) • 4 = 2 • (3 • 4)

The associative property does not work for subtraction or division.