ASSOCIATIVE PROPERTY:

In mathematics, the associative property holds true for both addition and multiplication.

Associative property of addition-when adding three numbers, if the order of the addends remains the same and the addends are regrouped, the sum of the numbers will remain the same.

Examples: $(2 + 4) + 8 = 2 + (4 + 8)$

$6 + 8 = 2 + 12$

$14 = 14$

General Rule: $(a + b) + c = a + (b + c)$

Associative property of multiplication-when multiplying three numbers, if the order of the factors remains the same and the factors are regrouped, the product of the number will remain the same.

Examples: $5 (3 * 9) = (5 * 3) * 9$

$5 * 27 = 15 * 9$

$135 = 135$

General Rule: $a (b * c) = (a*b) c$

COMMUTATIVE PROPERTY:

In mathematics, the commutative property holds true for both addition and multiplication.

Commutative property of addition-changing the order of the addends in an addition problem will not affect the sum.

Examples: 3 + 4 = 4 + 3

7 = 7

General Rule*: a + b = b + a*

Commutative property of multiplication-changing the order of the factors in a multiplication problem will not affect the product.

Examples: (9)(6) = (6)(9)

54 = 54

General Rule: *(a)(b) = (b)(a)*