



Key Takeaways



Properties of Multiplication

- $A(BC) = (AB)C$, whenever defined. (associative)
- $A(B \pm C) = AB \pm AC$, whenever defined. (left distributive)
- $(B \pm C)A = BA \pm CA$, whenever defined. (right distributive)



$$(A + B)^2 = (A + B)(A + B) = A^2 + AB + BA + B^2$$

$$(A + B)(A - B) = A^2 - AB + BA - B^2$$

