

NUMBER PROPERTIES



Unit Overview

In this unit, we will be working with properties of operations and how to apply those properties as strategies to multiply and divide.

Properties of Multiplication

There are four properties involving multiplication that will help make problems easier to solve. They are the **commutative**, **associative**, **zero**, and **distributive properties**.

Click on the link to watch the video "[Order doesn't matter when purely multiplying](#)".



Commutative Property

The commutative property is when two numbers are multiplied together and the product is the same regardless of the order of the multiplicands.

For *example*: $4 \times 2 = 2 \times 4$



Click [here](#) to view more examples of the commutative property of multiplication.



Click [here](#) to practice the commutative property of multiplication.

Associative Property

The associative property is when three or more numbers are multiplied and the product is the same regardless of the grouping of the factors.

For *example*: $(2 \times 3) \times 4 = 2 \times (3 \times 4)$



Click [here](#) to view more examples of the associative property of multiplication.



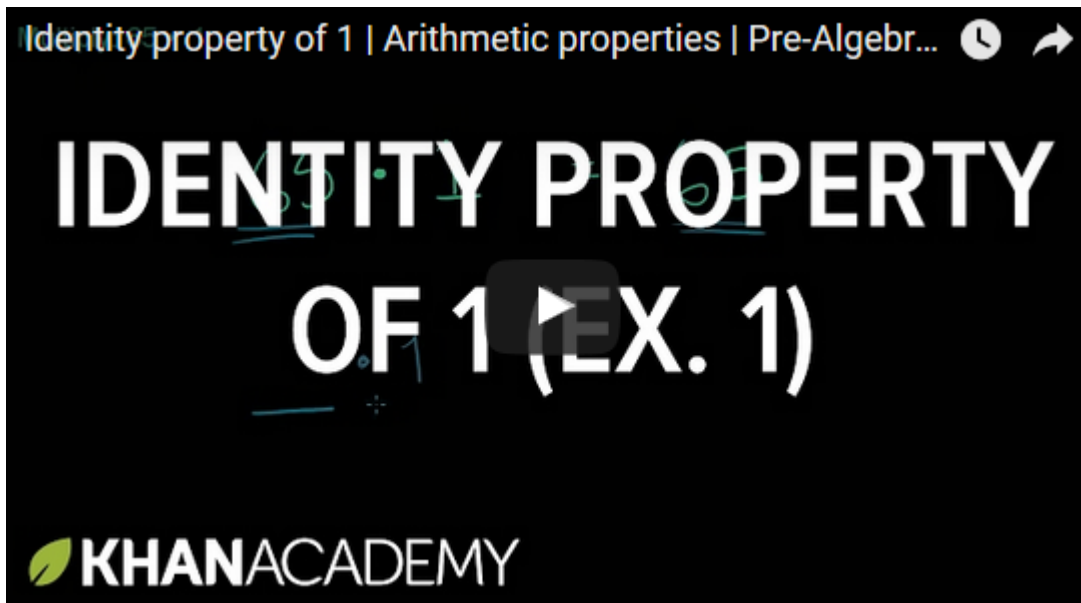
Click [here](#) to practice the associative property of multiplication.

Identity Property

The identity property is the product of any number and one is that number.

For *example*: $5 \times 1 = 5$

Click on the link to watch the video "[Identity property of 1](#)".

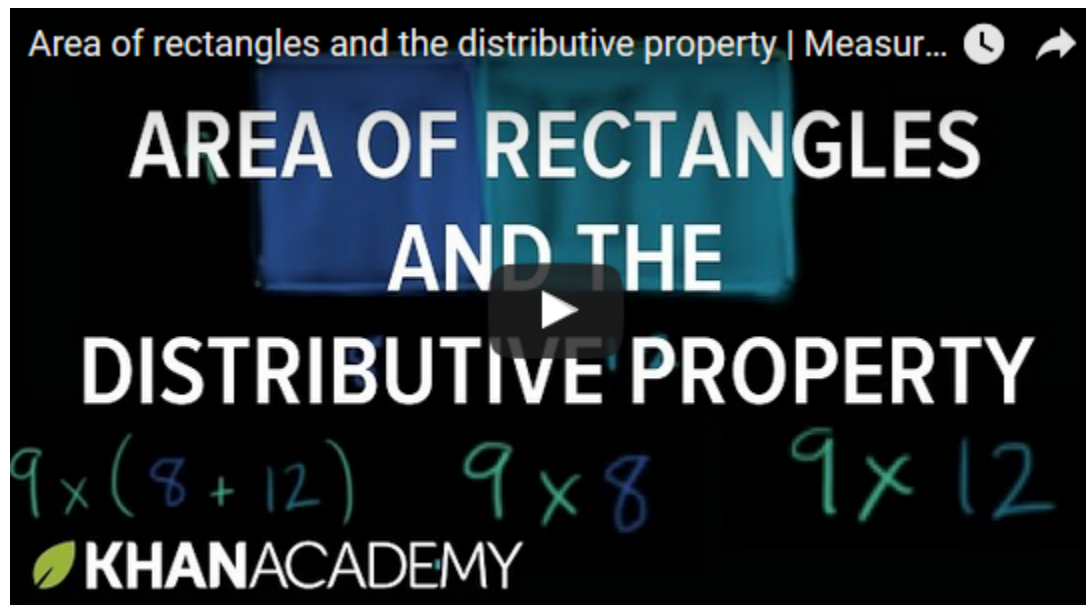


Distributive Property

The distributive property is when the sum of two numbers times a third number is equal to the sum of each addend times the third number.

For *example*: $4 \times (6 + 3) = 4 \times 6 + 4 \times 3$

Click on the link to watch the video "[Area of rectangles and the distributive property](#)".



Click [here](#) to view more examples of the distributive property of multiplication.



Click [here](#) to practice the distributive property of multiplication.

Practice



Click [here](#) to play a basketball game focusing on practicing your multiplication properties.