array

An arrangement of objects, pictures, or numbers in columns or rows.
Associative Property of Multiplication

The property which states that the way in which factors are grouped does not change the product. It is also called the Grouping Property of Multiplication.

Example: \((5 \times 4) \times 3 = 5 \times (4 \times 3)\)
basic fact

All addition or multiplication number sentences that contain the numbers 0 through 9 as addends or factors.

*Examples:* $7 + 5 = 12$
$9 \times 3 = 27$
Commutative Property of Multiplication

The property which states that the order of factors does not change the product. It is also called the Order Property of Multiplication.

Example: $4 \times 3 = 3 \times 4$
The property which states that multiplying a sum by a number is the same as multiplying each addend by the number and adding the products.

*Example:* \[2 \times (3 + 4) = (2 \times 3) + (2 \times 4)\]
To separate an amount into smaller, equal groups to find the number of groups or the number in each group.
The number that is divided in division.

Example: $8 \div 4 = 2$

dividend
division

An operation that results in a quotient.
divisor

The number that divides the dividend.

*Example:* $12 \div 3 = 4$

[ Arrow pointing to the number 3 with the label divisor ]
equal groups

Groups that contain the same number of objects. When you divide, you separate items into equal groups.
Related facts using the same numbers.

A fact family for 2, 4, and 6:

\[
\begin{align*}
2 + 4 &= 6 & 4 + 2 &= 6 \\
6 - 4 &= 2 & 6 - 2 &= 4 \\
\end{align*}
\]

A fact family for 3, 5, and 15:

\[
\begin{align*}
3 \times 5 &= 15 & 5 \times 3 &= 15 \\
15 \div 5 &= 3 & 15 \div 3 &= 5 \\
\end{align*}
\]
Factors

Numbers that when multiplied together give the product.

Example: $2 \times 3 = 6$
multiple

The product of a number and any other number.

Examples: 5, 10, 15, and 20 are all multiples of 5.
multiplication

An operation on two or more numbers that gives a product.
product

The answer to a multiplication problem.

*Example:* $4 \times 5 = 20$
Property of One for Multiplication

The property that states that the product of any number and 1 is that number.

Example: $7 \times 1 = 7$
quotient

The answer in a division problem.

*Example:* $32 \div 4 = 8$

quotient
square number

The product of a whole number multiplied by itself.

*Example:* \(3 \times 3 = 9\)

9 is a square number.
Zero Property of Multiplication

The property which states that the product of any number and 0 is 0.

Example: $8 \times 0 = 0$