

Chapter 3 – Understand Multiplication

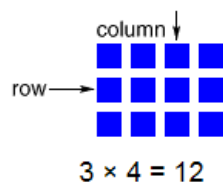
Addend - Any numbers that are added in addition.

Example:

$$\begin{array}{ccccc} & 2 & + & 3 & = & 5 \\ & \uparrow & & \uparrow & & \\ \text{addend} & & & \text{addend} & & \end{array}$$

Array - An arrangement of objects in rows and columns.

Example:


$$3 \times 4 = 12$$

Commutative Property of Multiplication - The property that states that you can multiply two factors in any order and get the same product.

Example:

$$\begin{array}{l} 2 \times 4 = 8 \\ 4 \times 2 = 8 \end{array}$$

Equal groups - Groups that have the same number of objects.



Factor - A number that is multiplied by another number to find a product.

Examples:

$$4 \times 7 = 28 \quad \begin{array}{r} 4 \\ \times 7 \\ \hline 28 \end{array}$$

The factors are 4 and 7.

Identity Property of Multiplication - The property that states that the product of any number and 1 is that number.

Example:

$$5 \times 1 = 5$$

$$1 \times 8 = 8$$

Multiply - When you combine equal groups, you can multiply to find how many in all; the opposite operation of division.

Number Sentence - A sentence that includes numbers, operation symbols, and a greater than or less than symbol or an equal sign.

Example:

$5 + 3 = 8$ is a number sentence.

Product - The answer in a multiplication problem.

Example:

$$3 \times 8 = 24$$


product

Related facts - A set of related addition and subtraction, or multiplication and division, number sentences.

Examples:

$$4 \times 7 = 28$$

$$7 \times 4 = 28$$

$$28 \div 4 = 7$$

$$28 \div 7 = 4$$

Unknown - the missing factor or quantity in multiplication or division.

Example:

Find $7 + n$ if $n = 5$.

$7 + n$	$7 + n$
↑	↓
variable	$7 + 5$
	↓
	12

Variable - A symbol or letter that stands for an unknown number.

Zero Property of Multiplication - The property that states that the product of zero and any number is zero.

Example:

$$0 \times 6 = 0$$
