

# Math Vocabulary Glossary

Essential math terms for Grades 6-8. Keep this handy when doing homework or studying for tests.

## Numbers and Types

**Integer:** A whole number that can be positive, negative, or zero (e.g., -3, 0, 7)

**Rational number:** Any number that can be written as a fraction  $a/b$  where  $b$  is not 0

**Irrational number:** A number that cannot be written as a simple fraction (e.g.,  $\pi$ ,  $\sqrt{2}$ )

**Prime number:** A number greater than 1 with exactly two factors: 1 and itself

**Composite number:** A number greater than 1 that has more than two factors

**Absolute value:** The distance of a number from zero on a number line, always positive

## Operations

**Sum:** The result of adding two or more numbers

**Difference:** The result of subtracting one number from another

**Product:** The result of multiplying two or more numbers

**Quotient:** The result of dividing one number by another

**Remainder:** The amount left over after division

## Algebra

**Variable:** A letter or symbol that represents an unknown value (e.g.,  $x$ ,  $y$ )

**Coefficient:** The number multiplied by a variable (e.g., 3 in  $3x$ )

**Constant:** A fixed value that does not change (e.g., 5 in  $2x + 5$ )

**Expression:** A combination of numbers, variables, and operations (no equal sign)

**Equation:** A statement that two expressions are equal, using an = sign

**Inequality:** A statement comparing expressions using  $<$ ,  $>$ , or not-equal symbols

**Geometry**

**Perimeter:** The total distance around the outside of a shape

**Area:** The amount of space inside a two-dimensional shape

**Volume:** The amount of space inside a three-dimensional shape

**Congruent:** Shapes that are exactly the same size and shape

**Similar:** Shapes with the same angles but different sizes (proportional sides)

**Parallel:** Lines that never intersect and are always the same distance apart

**Perpendicular:** Lines that intersect at a 90-degree right angle

**Data and Probability**

**Mean:** The average: add all values and divide by the count

**Median:** The middle value when data is arranged in order

**Mode:** The value that appears most frequently in a data set

**Range:** The difference between the highest and lowest values

**Probability:** The chance of an event happening, from 0 (impossible) to 1 (certain)

**Frequency:** The number of times a value or event occurs in a data set

Understanding the vocabulary is half the battle. When you see an unfamiliar word on a test, check this glossary first.