Mathematics (math) is the study of numbers, quantities, shapes, and space using mathematical processes, rules, and symbols. There are many branches of mathematics and a large vocabulary associated with this subject.

Here are some math words and terms you will likely come across but may not know their precise meanings. Any word or term shown in **bold** is defined in the following alphabetical list of math words and terms.

**Algorithm** A step-by-step mathematical procedure used to find an answer.

**Coefficient** A number that multiplies a variable. For example, 9 is the coefficient in 9x.

**Denominator** The bottom number in a fraction. The denominator represents the number of parts into which the whole is divided. For example, 6 is the denominator in the fraction \( \frac{5}{6} \).

**Equation** A mathematical statement used to show that two expressions are equal. It contains an equals sign. For example, 16 - 9 = 7 (the expression 16 - 9 and the expression 7 are equal).

**Greatest Common Factor** (greatest common divisor) The largest number that will divide two or more other numbers equally. For example, the greatest common factor of 32 and 48 is 16.

**Improper Fraction** (mixed fractions) A fraction that has a larger *numerator* than *denominator*. For example, \( \frac{9}{5} \) is an improper fraction.

**Inverse Operations** Opposite or reverse operations. Addition and subtraction are inverse operations, as are multiplication and division.

**Negative Number** A number that is less than zero. A minus sign is used to show that a number is negative. For example, -12 is a negative number.

**Numerator** The top number in a fraction. The numerator represents the number of parts of the whole. For example, 5 is the numerator in the fraction \( \frac{5}{6} \).
**Ordinal Number** A number that shows place or position, as in 2nd place.

**Positive Number** A number that is greater than zero. While a minus sign is used to signify a **negative number**, the absence of a minus sign signifies a positive number.

**Prime Number** A number that can be divided evenly only by itself and 1. For example, 7 is a prime number.

**Square Number** A number that results from multiplying another number by itself. For example, 49 is the square of 7 (7 x 7 = 49).

**Square Root of a Number** A number that is multiplied by itself to produce a **square number**. For example, 7 is the square root of 49. It is designated by the symbol √.

**Variable** A quantity that can change or vary, taking on different values. It is typically represented by a letter of the alphabet. For example x is the variable in 9x (x can be any number that is being multiplied by 9).

These are just some of the many words and terms found in mathematics. It is important to know the meanings of words and terms you will encounter as you progress through the study of math.