



Shop Math Course Glossary

This glossary provides key terms and definitions used throughout the TC3 Shop Math course across all four modules. It is designed to support learners in understanding essential concepts and reinforce consistent terminology.

- **Addition** - The process of combining two or more numbers to find a total.
- **Area** - The amount of space inside a flat surface; it tells how much surface something covers and is measured in square units. Equations used to calculate area include:
 - Rectangle/Square: $A = L \times W$
 - Triangle: $A = \frac{1}{2} \times \text{base} \times \text{height}$
 - Circle: $A = \pi \times r^2$
- **Basic Operations** - The four fundamental ways we work with numbers. They include addition, subtraction, multiplication, and division.
- **Circular Measurement** - Measurements used when working with round or curved objects, including radius, diameter, and circumference.
- **Circumference** - The distance around the outside of a circle; The formula to calculate circumference is $C = 2\pi r$.
- **Common Fraction** - A number that represents a part of a whole.
- **Cubic Unit** - A unit of volume representing a space that is one unit long, one unit wide, and one unit high.
- **Decimal** - A decimal is a number written with a decimal point where each digit has a place value that represents part of a whole.
- **Decimal Point** - The decimal point is a symbol used to separate the whole number from the fractional part of a decimal.
- **Denominator** - The number on the bottom of the fraction bar. This number reflects the number of equal parts in one whole.
- **Diameter** - The distance across a circle that passes through the center.

Course: Shop Math

- **Division** - The process of splitting a number into equal parts or determining how many equal groups can be made.
- **Equation** - An equation is a mathematical statement that shows two values are equal, using an equals sign (=).
- **Exponents** - Numbers that show how many times a base number is multiplied by itself.
- **Imperial System** - The standard system used in the United States that measures length using units such as inches, feet, yards, and miles.
- **Improper Fraction** - A number greater than one whole. The numerator of the fraction is, therefore, greater than the denominator of the fraction (Ex: $\frac{5}{2}$).
- **Least Common Denominator (LCD)** - The smallest number that two or more denominators can all divide into evenly. It is used to rewrite fractions so they have the same denominator, which makes them easier to add or subtract.
- **Linear Measurement** - The process of measuring the distance between two points in a straight line; it tells how long, wide, or tall something is.
- **Measurement** - The process of determining how big, long, heavy, or full something is using standard units.
- **Metric System** - A measurement system based on units of 10, used in most countries and many tools and equipment, including millimeters, centimeters, meters, and kilometers.
- **Mixed Number** - A whole number and a fraction (Ex: $1\frac{1}{2}$).
- **Multiplication** - The process of finding the total of equal groups by repeated addition.
- **Numerator** - The number on top of the fraction bar. This number reflects the number of equal parts being counted.
- **Order of Operations** - A set of rules that tells us what math operation to do first in an expression with multiple operations. **PEMDAS** is an acronym that reminds us of the sequence of steps to follow when solving mathematical expressions with multiple operations. It stands for parentheses, exponents, multiplication, division, addition, and subtraction.
- **Parentheses** - Symbols () used to group parts of an expression and indicate which operations should be performed first.

Course: Shop Math

- **Perimeter** - The total length around the outside of a two-dimensional shape. To calculate perimeter, add all the sides of a 2D shape together.
- **Place Value** - Place value is the position of a digit in a number that determines its value, such as tenths, hundredths, and thousandths.
- **Radius** - The distance from the center of a circle to its edge.
- **Reciprocal** - A fraction created by flipping the numerator and denominator of another fraction. For example, the reciprocal of $\frac{2}{3}$ is $\frac{3}{2}$. Reciprocals are used when dividing fractions.
- **Simplest Form** - The process of reducing the fraction so the numerator and denominator have no common factors (except 1).
- **Solution** - The correct answer to an equation.
- **Square Unit** - A unit of area representing a space that is one unit by one unit, such as one foot by one foot.
- **Subtraction** - The process of finding the difference between numbers or determining how much remains after a value is taken away.
- **Volume** - The amount of space inside a three-dimensional object; it tells how much something can hold and uses length, width, and height.
 - Rectangular Prism: $V = l \times w \times h$
 - Cylinder: $V = \pi r^2 \times h$
 - Cone: $V = \frac{1}{3}\pi r^2 \times h$
 - Sphere: $V = \frac{4}{3}\pi r^3$