

Student Reference: Geometry Concepts

Keep these pages in your geometry or math reference folder or binder. These definitions may come in handy in the future.

Look up each item in your math textbook or on the Geometry Bulletin Board Topper. Draw an example of each item in the box provided.

Lines

- **Point:** a fixed location having no dimension—no length, height, or width—and identified by at least one coordinate; represented by a dot on paper
- **Line:** a set of points that have one dimension—length—but no width or height; a geometric straight line is unlimited in extent; it has no endpoints
- **Line Segment:** a finite section of a straight line; it has two endpoints
- **Ray:** a section of a straight line that extends from one endpoint
- **Parallel Lines:** lines that extend in the same direction and at the same distance apart at every point, so as never to meet
- **Intersecting Lines:** two lines that cross each other at one point
- **Perpendicular Lines:** two lines that cross each other at one point to form four right angles

Circles

- **Circle:** a plane figure bounded by a single curved line, every point of which is equally distant from the point at the center of the figure
- **Arc:** any part of a curve, especially of a circle
- **Chord:** a straight line segment joining any two points on an arc, curve, or circumference
- **Circumference:** the line bounding a circle

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- **Diameter:** a line segment passing through the center of a circle or sphere from one side to the other

- **Radius:** any straight line extending from the center to the edge of a circle or sphere

- **Tangent:** a line that touches, but does not intersect, a curve or curved surface at one and only one point

Angles

- **Right Angle:** an angle measuring 90 degrees, formed by the intersection of two perpendicular lines

- **Acute Angle:** an angle that measures less than 90 degrees but more than 0 degrees

- **Obtuse Angle:** an angle that measures more than 90 degrees but less than 180 degrees

- **Angle Bisector:** a straight line that divides an angle into two equal parts

Triangles

- **Equilateral Triangle:** a triangle with all sides equal

- **Isosceles Triangle:** a triangle with two equal sides

- **Scalene Triangle:** a triangle with no equal sides or angles

- **Right Triangle:** a triangle with one right angle

- **Acute Triangle:** a triangle with three acute angles

- **Obtuse Triangle:** a triangle with one obtuse angle

- **Hypotenuse:** the side opposite the right angle in a right triangle