Glossary

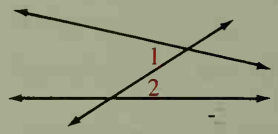
acute angle: An angle with measure between 0 and 90. (p. 17)

acute triangle: A triangle with three acute angles. (p. 93)

adjacent angles: Two angles in a plane that have a common vertex and a common side but no common interior points. (p. 19)

adjacent arcs: Arcs of a circle that have exactly one point in common. (p. 339)

alternate interior angles: Two nonadjacent interior angles on opposite sides of a transversal. Angles 1 and 2 are alternate interior angles. (p. 74)

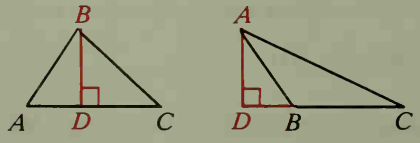


altitude of a parallelogram: Any segment perpendicular to the line containing a base from any point on the opposite side. (p. 424)

altitude of a solid: *See* prism, pyramid, cone, cylinder.

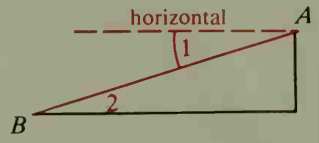
altitude of a trapezoid: Any segment perpendicular to a line containing one base from a point on the opposite base. (p. 435)

altitude of a triangle: The perpendicular segment from a vertex to the line containing the opposite side. In the figure, $\overline{BD}$ and $\overline{AD}$ are altitudes. (p. 152)



angle: A figure formed by two rays that have the same endpoint. The two rays are called the *sides* of the angle. Their common endpoint is the *vertex*. (p. 17)

angle of depression: When a point B is viewed from a higher point A, as shown by the diagram below, $\angle 1$ is the angle of depression. (p. 317)



angle of elevation: When a point A is viewed from a lower point B, as shown by the diagram at the left below, $\angle 2$ is the angle of elevation. (p. 317)

apothem: The (perpendicular) distance from the center of a regular polygon to a side. (p. 441)

auxiliary line: A line (or ray or segment) added to a diagram to help in a proof. (p. 94)

axes: Usually, two perpendicular lines used to establish a coordinate system. (p. 523)

axiom: A statement that is accepted without proof. (p. 12)

base of an isosceles triangle: *See* legs of an isosceles triangle.

base of a parallelogram: Any side of a parallelogram can be considered its base. The term *base* may refer to the line segment or its length. (p. 424)

base of a pyramid: *See* pyramid.

bases of a prism: *See* prism.

bases of a trapezoid: *See* trapezoid.

biconditional: A statement that contains the words "if and only if." (p. 34)

bisector of an angle: The ray that divides the angle into two congruent adjacent angles. (p. 19)

bisector of a segment: A line, segment, ray, or plane that intersects the segment at its midpoint. (p. 13)

center of a circle: *See* circle.

center of a regular polygon: The center of the circumscribed circle. (p. 441)

central angle of a circle: An angle with its vertex at the center of the circle. (p. 339)

central angle of a regular polygon: An angle formed by two radii drawn to consecutive vertices. (p. 441)

chord: A segment whose endpoints lie on a circle. (p. 329)

circle: The set of points in a plane that are a given distance from a given point in the plane. The given point is the *center*, and the given distance is the *radius*. (p. 329)

circumference of a circle: The perimeter of a circle given by the limiting number approached by the perimeters of a sequence of regular inscribed polygons. For radius r, $C = 2\pi r$. (p. 446)