

# Glossary

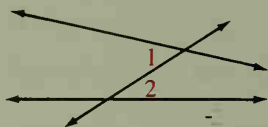
**acute angle:** An angle with measure between 0 and 90. (p. 17)

**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)

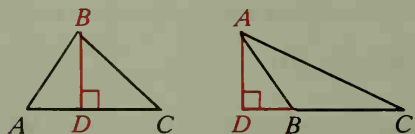


**altitude of a parallelogram:** Any segment perpendicular to the line containing a base from any point on the opposite side. (p. 424)

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

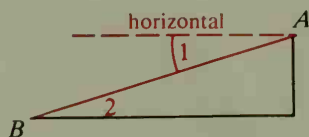
**altitude of a trapezoid:** Any segment perpendicular to a line containing one base from a point on the opposite base. (p. 435)

**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)