quadrant: Any one of the four regions into which the plane is divided by the coordinate axes. (p. 523)

quadrilateral: A 4-sided polygon. (p. 101)

radius of a circle: *See* circle.

radius of a regular polygon: The distance from the center to a vertex. (p. 441)

radius of a right cylinder: *See* cylinder.

ratio: The ratio of x to y ($y \neq 0$) is $\frac{x}{y}$ and is sometimes written $x:y$. (pp. 241, 242)

ray: The ray AC ($\overrightarrow{AC}$) consists of segment $\overline{AC}$ and all other points P such that C is between A and P. The point named first, here A, is the *endpoint of* $\overrightarrow{AC}$. (p. 11)

rectangle: A quadrilateral with four right angles. (p. 184)

rectangular solid: A right rectangular prism. (p. 475) *See also* prism.

reflection: A transformation in which a *line of reflection* acts like a mirror, reflecting points to their images. A reflection in a line m maps every point P to a point P' such that: (1) if P is not on line m, then m is the perpendicular bisector of $\overline{PP'}$; and (2) if P is on line m, then $P' = P$. (p. 577)

regular polygon: A polygon that is both equiangular and equilateral. (p. 103)

regular pyramid: *See* pyramid.

remote interior angles: *See* exterior angle of a triangle.

rhombus: A quadrilateral with four congruent sides. (p. 184)

right angle: An angle with measure 90. (p. 17)

right solid: *See* cone, cylinder, prism.

right triangle: A triangle with one right angle. (p. 93)

rotation: A rotation about point O through $x°$ is a transformation such that: (1) if point P is different from O, then $OP' = OP$ and $m\angle POP' = x$; and (2) if point P is the same as O, then $P' = P$. (p. 588)

rotational symmetry: A figure has rotational symmetry if there is a rotation that maps the figure onto itself. (p. 609)

same-side interior angles: Two interior angles on the same side of a transversal. (p. 74)

scalar multiple of a vector: The product of the vector (a, b) and the real number k is the scalar multiple (ka, kb). (p. 540)

scale factor: For similar polygons, the ratio of the lengths of two corresponding sides. (p. 249)

scalene triangle: A triangle with no sides congruent. (p. 93)

secant of a circle: A line that contains a chord. (p. 329)

sector of a circle: A region bounded by two radii and an arc of the circle. (p. 452)

segment of a line: Two points on the line and all points between them. The two points are called the *endpoints* of the segment. (p. 11)

segments divided proportionally: $\overline{AB}$ and $\overline{CD}$ are divided proportionally if points L and M lie on $\overline{AB}$ and $\overline{CD}$, respectively, and $\frac{AL}{LB} = \frac{CM}{MD}$. (p. 269)

semicircles: The two arcs of a circle that are cut off by a diameter. The *measure of a semicircle* is 180. (p. 339)

sides of an angle: *See* angle.

sides of a triangle: *See* triangle.

similarity mapping: A transformation that maps any figure to a similar figure. *See also* dilation. (p. 593)

similar polygons: Two polygons are similar if their vertices can be paired so that corresponding angles are congruent and corresponding sides are in proportion. (p. 249)

similar solids: Solids that have the same shape but not necessarily the same size. (p. 508)

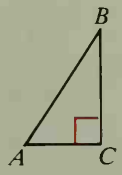
simplest form of a radical: No perfect square factor other than 1 is under the radical sign, no fraction is under the radical sign, and no fraction has a radical in its denominator. (p. 287)

sine (sin):

sine of $\angle A = \frac{BC}{AB}$

or $\sin A = \frac{\text{opposite}}{\text{hypotenuse}}$

(p. 312)



skew lines: Lines that are not coplanar. (p. 73)

slant height of a regular pyramid: *See* pyramid.

slant height of a right cone: *See* cone.

slope of a line: The steepness of a nonvertical line, defined by $m = \frac{y_2 - y_1}{x_2 - x_1}$, $x_1 \neq x_2$, where $P_1(x_1, y_1)$ and $P_2(x_2, y_2)$ are two points on the line. (p. 529)

space: The set of all points. (p. 6)