sphere: The set of all points in space that are a given distance from a given point. (p. 329)

square: A quadrilateral with four right angles and four congruent sides. (p. 184)

straight angle: An angle with measure 180. (p. 17)

sum of two vectors: The sum of the vectors (a, b) and (c, d) is the vector $(a + c, b + d)$. (p. 541)

supplementary angles: Two angles whose measures have the sum 180. (p. 50)

symmetry: A figure in the plane has symmetry if there is an isometry, other than the identity, that maps the figure onto itself. (p. 609)

tangent (tan):

$$\text{tangent of } \angle A = \frac{BC}{AC}$$

$$\text{or } \tan A = \frac{\text{opposite}}{\text{adjacent}}$$

(p. 305)

tangent circles: Coplanar circles that are tangent to the same line at the same point. (p. 334)

tangent to a circle: A line in the plane of the circle that intersects the circle in exactly one point, called the *point of tangency*. (p. 329)

tessellation: A pattern in which congruent copies of a figure completely fill the plane without overlapping. (p. 610)

theorem: A statement that can be proved. (p. 23)

total area of a prism: The sum of the areas of all its faces. (p. 476)

transformation: A one-to-one mapping from the whole plane to the whole plane. (p. 572)

translation: A transformation that glides all points of the plane the same distance in the same direction, and maps any point (x, y) to the point $(x + a, y + b)$ where a and b are constants. Also called a *glide*. (pp. 583, 584)

translational symmetry: A figure has translational symmetry if there is a translation that maps the figure onto itself. (p. 610)

transversal: A line that intersects two or more coplanar lines in different points. (p. 74)

trapezoid: A quadrilateral with exactly one pair of parallel sides, called *bases*. The other sides are *legs*. (p. 190)

triangle: The figure formed by three segments joining three noncollinear points. Each of the three points is a *vertex* of the triangle and the segments are the *sides*. (p. 93)

vector: Any quantity that has both magnitude and direction. (p. 539)

Venn diagram: A circle diagram that may be used to represent a conditional. (p. 208)

vertex angle of an isosceles triangle: The angle opposite the base. (p. 134)

vertex of an angle: *See* angle.

vertex of a pyramid: *See* pyramid.

vertex of a triangle: *See* triangle.

vertical angles: Two angles whose sides form two pairs of opposite rays. $\measuredangle$ 1 and 2 are vertical angles, as are $\measuredangle$ 3 and 4. (p. 51)