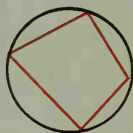
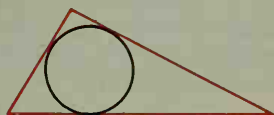


circumscribed circle: A circle is circumscribed about a polygon when each vertex of the polygon lies on the circle. The polygon is *inscribed* in the circle. (p. 330)



circumscribed polygon: A polygon is *circumscribed* about a circle when each side of the polygon is tangent to the circle. The circle is *inscribed* in the polygon. (p. 334)



collinear points: Points all in one line. (p. 6)

common tangent: A line that is tangent to each of two coplanar circles. A common *internal* tangent intersects the segment joining the centers. A common *external* tangent does not intersect that segment. (p. 334)

complementary angles: Two angles whose measures have the sum 90. (p. 50)

composite of mappings: A transformation that combines two mappings. The composite of mappings S and T maps P to P'' where $T(P) = P'$ and $S(P') = P''$. Also called a product of mappings. (pp. 599, 605)

concentric circles: Circles that lie in the same plane and have the same center. (p. 330)

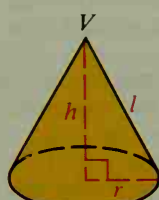
concentric spheres: Spheres that have the same center. (p. 330)

conclusion: See if-then statement.

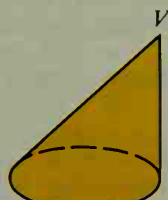
concurrent lines: Two or more lines that intersect in one point. (p. 386)

conditional statement: See if-then statement.

cone: The diagrams illustrate a *right cone* and an *oblique cone*. Both have circular *bases* and a *vertex* V . In the right cone, h is the length of the *altitude*, l is the *slant height*, and r is the *radius*. (p. 490)



Right



Oblique

congruence mapping: See isometry.

congruent angles: Angles that have equal measures. (p. 19)

congruent arcs: Arcs, in the same circle or in congruent circles, that have equal measures. (p. 340)

congruent circles (or spheres): Circles (or spheres) that have congruent radii. (p. 330)

congruent figures: Figures having the same size and shape. (p. 117)

congruent polygons: Polygons whose vertices can be matched up so that the corresponding parts (angles and sides) of the polygons are congruent. (p. 118)

congruent segments: Segments that have equal lengths. (p. 13)

contraction: See dilation.

contrapositive of a conditional: The contrapositive of the statement *If p , then q* is the statement *If not q , then not p* . (p. 208)

converse: The converse of the statement *If p , then q* is the statement *If q , then p* . (p. 33)

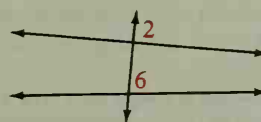
convex polygon: A polygon such that no line containing a side of the polygon contains a point in the interior of the polygon. (p. 101)

coordinate plane: The plane of the x -axis and the y -axis. (p. 523)

coplanar points: Points all in one plane. (p. 6)

corollary of a theorem: A statement that can be proved easily by applying the theorem. (p. 94)

corresponding angles: Two angles in corresponding positions relative to two lines. In the figure, $\angle 2$ and $\angle 6$ are corresponding angles. (p. 74)



cosine (cos):

$$\text{cosine of } \angle A = \frac{AC}{AB}$$

$$\text{or } \cos A = \frac{\text{adjacent}}{\text{hypotenuse}}$$

(p. 312)



counterexample: An example used to prove that an if-then statement is false. For that counterexample, the hypothesis is true and the conclusion is false. (p. 33)