4-2 If two angles of a triangle are congruent, then the sides opposite those angles are congruent. (p. 136)

Corollary An equiangular triangle is also equilateral. (p. 136)

4-3 **(AAS Theorem)** If two angles and a non-included side of one triangle are congruent to the corresponding parts of another triangle, then the triangles are congruent. (p. 140)

4-4 **(HL Theorem)** If the hypotenuse and a leg of one right triangle are congruent to the corresponding parts of another right triangle, then the triangles are congruent. (p. 141)

4-5 If a point lies on the perpendicular bisector of a segment, then the point is equidistant from the endpoints of the segment. (p. 153)

4-6 If a point is equidistant from the endpoints of a segment, then the point lies on the perpendicular bisector of the segment. (p. 153)

4-7 If a point lies on the bisector of an angle, then the point is equidistant from the sides of the angle. (p. 154)

4-8 If a point is equidistant from the sides of an angle, then the point lies on the bisector of the angle. (p. 154)

Quadrilaterals

5-1 Opposite sides of a parallelogram are congruent. (p. 167)

5-2 Opposite angles of a parallelogram are congruent. (p. 167)

5-3 Diagonals of a parallelogram bisect each other. (p. 167)

5-4 If both pairs of opposite sides of a quadrilateral are congruent, then the quadrilateral is a parallelogram. (p. 172)

5-5 If one pair of opposite sides of a quadrilateral are both congruent and parallel, then the quadrilateral is a parallelogram. (p. 172)

5-6 If both pairs of opposite angles of a quadrilateral are congruent, then the quadrilateral is a parallelogram. (p. 172)

5-7 If the diagonals of a quadrilateral bisect each other, then the quadrilateral is a parallelogram. (p. 172)

5-8 If two lines are parallel, then all points on one line are equidistant from the other line. (p. 177)

5-9 If three parallel lines cut off congruent segments on one transversal, then they cut off congruent segments on every transversal. (p. 177)

5-10 A line that contains the midpoint of one side of a triangle and is parallel to another side passes through the midpoint of the third side. (p. 178)

5-11 The segment that joins the midpoints of two sides of a triangle
(1) is parallel to the third side.
(2) is half as long as the third side. (p. 178)

5-12 The diagonals of a rectangle are congruent. (p. 185)

5-13 The diagonals of a rhombus are perpendicular. (p. 185)

5-14 Each diagonal of a rhombus bisects two angles of the rhombus. (p. 185)