Geometry Final Review

Chapter 1
Know the definitions for acute, right, obtuse, complementary, supplementary, and vertical angles

Chapter 2
Write a conditional statement
Identify the hypothesis and conclusion of a conditional statement
Construct the converse, inverse, and contrapositive of a conditional statement (see Chapter 5)

Chapter 3
Identify corresponding, alternate interior, alternate exterior, same-side interior, same-side exterior angle pairs
Determine the measure of angles given parallel lines and a transversal

Chapter 4
Know the definitions for scalene, isosceles, equilateral, acute, equiangular, right, and obtuse triangles
Know that the angles of a triangle add to 180º
Know the congruent triangle theorems: SSS, SAS, ASA, AAS, HL
Understand CPCTC

Chapter 5
Know the properties of midsegments of triangles
Understand triangle inequalities

Chapter 6
Know the properties of trapezoids, isosceles trapezoids, kites, parallelograms, rectangles, and rhombi

Chapter 7
Be able to solve a proportion
Use ratios to solve for the lengths of similar shapes

Chapter 8
Be able to use the Pythagorean Theorem
Know the two special right triangles and the ratios of their sides
Be able to use SOH-CAH-TOA to solve for side length or angles

Chapter 10
Calculate the perimeter and area of parallelograms, triangles, trapezoids
Calculate the circumference and area of a circle
Calculate the arc length and area of a sector

Chapter 12
Know the properties of tangent lines
Calculate the measure of central, inscribed, and secant angles
Understand that the perpendicular bisector of a chord contains the circle's center
Solve for segment lengths on chords
Write the equation of a circle