Geometry: Semester 1 Exam Study Guide

Vocabulary:

Complementary Angles	Congruent	Obtuse Triangle
Supplementary Angles	Regular	Equilateral Triangle
Skew Lines	Equilateral	Right Triangle
Parallel Lines	Equiangular	Isosceles Triangle
Perpendicular Lines	Distance	Scalene Triangle
Segment Bisector	Equidistant	Vertical Angles
Euclid's Undefined Terms	Midpoint	Corresponding Angles
Theorem	Perpendicular Bisector	Alternate Interior Angles
Postulate	Median	Alternate Exterior Angles
Axiom	Altitude	Consecutive Interior Angles
Hypothesis	Angle Bisector	Linear Pair
Conclusion	Midsegment	Collinear
Negation	Acute Triangle	Coplanar

Theorems/Postulates/Properties:

Segment Addition Postulate
Angle Addition Postulate
Parallel Line Theorems and their Converses
    Ex: Corresponding angles are $\cong$ if parallel lines are cut by a transversal
        Converse: Lines are parallel if corresponding angles are $\cong$
Reflexive Property
Transitive Property
Symmetric Property
Distributive Property
Addition/Subtraction/Multiplication/Division Properties
Substitution Property
5 Theorems for proving triangles congruent

   1.   2.   3.   4.   5.

If two angles are congruent in a triangle, opposite sides are congruent (also know the converse)

Skills:

Find slope.
Find distance.
Find midpoint.
Write converse, inverse, and contrapositive given a conditional statement.
Find missing measures given parallel lines cut by a transversal.
Find missing measures given diagram with an exterior angle of a triangle.
Find the surface area of a prism.
Find the volume of a prism.
Find the surface area of a cylinder in terms of π.
Find the volume of a cylinder in terms of π.
Find the circumference/area of a circle in terms of π.
Know what CPCTC stands for and how to use it.
Proofs: There are 2. One involves parallel lines (Ch3), one involves 2 triangles (Ch4).