Math 306 Test 1 Study Guide Chapters 1, 12, 13, 15, 16

- Describe different views of mathematics
- Summarize three needs that influence the mathematics curriculum
- Describe different meanings of fractions
- Write problems that use a given meaning of fractions
- Model different operations involving fractions
- Illustrate how mistakes involving place value can be addressed
- Connect different representations of fractions, decimals, and percents
- Explain how to form equivalent ratios
- Solve proportional problems
- Describe van Hiele's levels of geometric understanding
- Identify figures with reflective and rotational symmetry
- Accurately draw polygons and polyhedrons with specific dimensions, areas, or volumes
- Outline the measurement process
- Identify the eight concepts to help students choose a unit
- Use the measurement process to find the capacity, volume, length and area
- Apply estimation methods
- Use the Pythagorean Theorem to determine a missing side lengths
- Determine the area of polygons (know the area & circumference formulas of a circle, area formulas for a rectangle and triangle)
- Determine the volume of polyhedrons.
- Create a concept map quadrilaterals or triangles.