Review II

1. Section 10.4

   a. Definition of Similarity
      i. Corresponding Sides
      ii. Corresponding Angles
      iii. Scale Factor
   b. Definition of Similar Triangles
   c. Angle, Angle Property (AA)
   d. Properties of Proportion
      i. Parallel Line to Side of a Triangle Divides Intersecting Sides into Proportional Segments
      ii. Parallel Lines Cutting Off Congruent Segments on One Transversal Cut Off Congruent Segments on All Transverals
   e. Midsegments
      i. Triangle Midsegments
      ii. Quadrilateral Midsegments
   f. Indirect Measurements

2. Section 10.5

   a. Cartesian Coordinate System
      i. Origin
      ii. x-axis, horizontal axis
      iii. y-axis, vertical
      iv. x-coordinate, abscissa
      v. y-coordinate, ordinate
   b. Graph of an equation or relation
   c. Graphs and Equations of Lines
      i. Horizontal Lines, $y=d$
      ii. Vertical Lines, $x = c$
      iii. Slant Lines
         a) Slope
            i) Slope Formula
         b) Intercepts
         c) Linear Equation
            i) Slope-Intercept Form, $y = mx + b$
            ii) General Form, $Ax + By + C = 0$
   d. Systems of Linear Equations
      i. Solution(s) of System of Linear Equations
         a) Unique Solution
         b) No Solution
         c) Infinitely Many Solutions
      ii. Graphical Solution
      iii. Substitution Method for Solution
      iv. Elimination Method for Solution
      v. Applications
   e. Fitting Data to a Line

3. Section 11.1

   a. Linear Measure
      i. English Units of Measure
      ii. Metric System
      iii. Conversion
         a) Between English and Metric
         b) Between English Units
         c) Between Metric Units
   b. Distance Properties
      i. Triangle Inequality

c. Perimeter of a Planar Figure
    i. Polygons
        a) Triangles
        b) Quadrilaterals
            1) Trapezoids
            2) Parallelograms
            3) Rectanges
            4) Squares
        c) Regular Polygons
    ii. Circles
    iii. Arc Length for Sectors
        a) Central Angle

4. Section 11.2

    a. Area on a Geoboard
    b. Conversion of Units of Area
    c. Area of Planar Figures
        i. Polygonal Figures
            a) Rectangle
            b) Parallelogram
            c) Triangle
            d) Trapezoid
        ii. Circles
        iii. Sectors
            a) Central Angle

5. Section 11.3

    a. Pythagorean Theorem
        i. Right Triangle
        ii. Sides
        iii. Hypotenuse
    b. Applications
        i. Given Sides Y Compute Hypotenuse
        ii. Given a Side and Hypotenuse Y Compute Other Side
    c. 45E - 45E - 90E Triangle
    d. 30E - 60E - 90E Triangle
    e. Converse of Pythagorean Theorem
        i. $a^2 \% b^2 ' c^2$ Y Right Triangle
    f. Distance Formula in Plane

6. Section 11.4

    a. Surface Area of Right Prisms
        i. Nets
        ii. Lateral Surfaces + 2 Bases
            a) Lateral Surfaces = Rectangles
    b. Surface Area of Right Pyramid
        i. Nets
        ii. Lateral Surfaces + 1 Base
            a) Lateral Surfaces = Triangles
            b) Slant Height
    c. Surface Area of Right Circular Cylinders
        i. Nets
        ii. Lateral Surface + 2 Bases
            a) Lateral Surface = Rectangle
    d. Surface Area of Right Circular Cones
        i. Lateral Surface + 1 Base
            a) Lateral Surface = Sector
    e. Surface Area of Sphere

7. Section 11.5

    a. Volume of Right Rectangular Prisms
        i. V = lwh
    b. Volume of Prisms and Cylinders
        i. V = Base Area x Height
    c. Volume of Pyramids and Cones
        i. V = (1/3) Base Area x Height
    d. Volume of Spheres