# Week 4 Geometry Assignment:

Day 1: pp. 65-66 #1-24, 26-30 [28-32]\* Day 2: pp. 71-73 #1-28, 31-35 Day 3: pp. 76-77 #1-24, 26-30 Day 4: pp. 80-81 #1-29 Day 5: Chapter 2 test

\* Cummulative Review problem #'s adjusted for 3rd edition books

### Notes on Assignment:

Pages 65-66:

#### Work to show:

#1-8: Three answers for each of these
#9-10: Answers only
#11-14: Drawings
#15-19: Answer as the question instructs.
#20-23: Write down the table and fill it in. Show calculations as needed.
#24: Answers only
CR: Answers only

- #1-8: Concave figures "cave in" somewhere.
- #24d: Think of the how many diagonals come from each vertex. In addition, think of how many vertices you have. Lastly, take into consideration that if you count all of the diagonals from each vertex, you will be counting each one twice.
- #31: What if I and m are parallel?

### Pages 71-73:

#### Work to show:

#1-17: Answers only#18-20: Drawings#20-28: Answer as the question instructs.CR: Answers only

- #1-8: Use the words right and regular if they apply.
- #12: This figure is not lying on its base.
- #15-17: Give real world examples of these figures.

- #18-20: When it says draw them without showing the base, it means that the base would be sitting on the table. Don't draw it on its side.
- #25: Remember what regular means. Can you have a base that is not regular for a pyramid?
- #27: Start this "Every closed surface..."
- #28: There are 3 possible answers here, depending on how the plane intersects the cone.

### Pages 76-77:

#### Work to show:

#1-23: Answers only#24: Write down the table and fill it in. Show calculations as needed.CR: Answers only

- #1-10: When you check these, have your book open so you can read through the ones you missed and see why you missed them.
- #21-22: How many faces would it have? Name it according to that.
- #24: Make sure you read the definition of the diagonal of a prism just above #24 in the book. For the first entry in that table, the base is a quadrilateral. That means it looks similar to figure (c) on page 74. How many diagonals could you draw from the front left bottom vertex? Since the diagonal cannot connect 2 vertices on the same face, the only diagonal possible would go to the back right upper vertex. That means the first entry in your chart is 1. The total amount of diagonals would be 4 (one coming from each bottom vertex and ending at the opposite vertex on the top.).

Use the picture on page 76 (prob. #14) for the next line in the chart. Then see if you can visualize the answers for the other figures. If you need pictures of the other prisms, see pages 464-468.

#26-29: Can you connect any 2 points and have the segment be totally contained in the figure? Then it is convex.

### Pages 80-81:

#### Work to show:

#1-10: Answers only#11-18: Drawings#19-28: Answer as the question instructs.

Chapter Review – no notes

## Chapter 2 test:

For the test:

- Given pictures of lines, rays, circles, etc., use the proper symbols to name them.
- Identify plane figures
  - Give their names (depending on the number of sides)
  - Tell whether or not they are regular.
  - Tell whether they are convex or concave.
- Give the name of figures in space (cylinders, cones, prisms, pyramids, polyhedra, spheres)
  - Tell whether they right, oblique, and/or regular
  - Tell whether they are convex or concave.
- State the Line Separation Postulate
- Fill-in-the-blank questions regarding concepts from the chapter
- Given a drawing, answer questions using set operations such as intersection and union. (Use correct notation.)
- Given a drawing of a circle, answer questions about it. (Use correct notation.)