# Week 28 Geometry Assignment

Day 1: pp. 558-559 #1-15, 21-26 *[23-28]*\* Day 2: pp. 562-563 #1-18 Day 3: pp. 568-570 #1-15 Day 4: pp. 573-575 #1-11 Day 5: pp. 578-579 #1-28

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

## Notes on Assignment:

Pages 558-559:

Work to show:

#1-10: Write the proportion and solve.#11-15: Answer as directed.CR: Answer as directed.

- #1-10: Use the theorems of this section to set up your proportions to solve.
- #5: Since the medians and altitudes are both proportional to the lengths of the corresponding sides, they are proportional to one another.
- #8-10: Remember that the ratio of the areas of similar triangles is equal to the <u>square</u> of the ratio of the lengths of corresponding sides.
- #11-15: Your answers to these problems may vary from what is in the solutions, but they should be based on the theorems of this section.
- #21-26 [23-28]: These are all from section 2.5 except for #22 [24], which is from section 11.5.

## Pages 562-563:

### Work to show:

All problems: Write the proportion and solve.

- #1-5: Make sure that if you have miles on the top of the ratio and inches on the bottom of one ratio in your proportion, that it is the same in the other.
- #6-18: These are all solved by similar triangles. If there is not a picture drawn, make

sure to draw one. Make sure that you have the same unit of measure on the top of each ratio and the same unit of measure on the bottom. Also, be careful in deciding which sides to use in your ratio, as some of the triangles are not oriented the same way.

- #16: This problem involves areas. You know the area now. What does she want the area to be? Make a ratio out of these 2 numbers and remember that this ratio equals the *square* of the ratio of the corresponding sides.
- #17: Remember that the perimeter (how much fencing is used) is has the same ratio as the corresponding sides.

## Pages 568-570:

#### Work to show: All problems: Show work.

- #4: You need to write both OY and YM in terms of OM.
- #9-15: Be careful setting these up. Some lengths may end up being represented as binomials, like (x + 3) in #12. You may also have to do some simple adding and subtracting of numbers to get lengths.
- #13: You will end up with a quadratic equation that can be solved by factoring.
- #14: If you know the radius, you know the diameter. If you know the diameter, you can find that little piece that you need for your equation to find x.
- #15: Find the diameter first.

## Pages 573-575:

### Work to show: #1-11: Answer as directed and show any work needed.

- #1-4: Measure in mm.
- #5-10: Length to width means put the length in the denominator.

## Pages 578-579:

Chapter Review – no notes.

## Work to show:

All problems: Show work as needed.