Lesson 6.2 – Properties of Parallelograms

Oh dear…

Turn to page 735 in your text. Find the list of theorems for chapter 6. How many of them are there? Yup, there are a lot, 18 in fact. Alright, don't panic. I know what you are thinking: "how in the world are we supposed to remember all those???"

All of these theorems deal with quadrilaterals. They are broken into groups, each group focused on a different set of quadrilaterals. Whole sets of these theorems deal with the same type of quadrilateral. If you can see that, organizing all this information will be much simpler. We are going to be repeatedly reviewing this structure to build an image of it in your head. I want it burned into your memories with flaming letters and lines. ;)

Remember, you will be able to have your theorem list with you, so you don't have to memorize them verbatim. What you *DO* need to do is get the quadrilateral family tree crystal clear in your mind and be able to recall the properties of each type of quadrilateral.

Properties of parallelograms

First, if you have not done so yet, work through the activity worksheet for this lesson. It is available on the class website. This worksheet will help you discover and develop the key properties and theorems defining parallelograms.

Organizing all this stuff

Next, take out a piece of paper. Lay it down long ways (landscape style). On this sheet, draw the entire quadrilateral family tree from memory. Make the box for a specific quadrilateral the right shape. Mark each box with the appropriate congruence (angle and/or side) and parallel information. Write the name of the shape in the box.

Now, circle the parallelogram subfamily. Beside (or below) it, write out the properties of parallelograms we've learned. There are four basic properties (three are theorems).

When you are done, turn to page 289 and compare your tree with the one in the book. Make any corrections needed.

Now check your list of properties. You should have basically (in your own words) identified theorems 6.1 – 6.3. Another very important property to note is that consecutive angles are supplementary. Make any corrections needed.

Repetition is your best friend!

You should go through this exercise daily. It should take less than 5 minutes and will help you organize this information extremely well.