**Sketching Exercises**

In-Class Activity

Sketch the following shapes in the front plane in Solidworks. Create a new part file for each sketch. Keep in mind that all sketches should be completely defined and that relations should be used when possible. All dimensions are in inches.

1. Sketch a 3” by 4” rectangle. Place the origin at the lower left hand corner. *(you don’t need to turn this in)*
2. Sketch an equilateral triangle with a base length of 2.75”. Place the origin at the midpoint of the base. *(you don’t need to turn this in)*

Homework Assignment (HW5)

Sketch the cross section of a W8x10 wide flange section (I-beam). Place the origin in the center of the cross section. Use the following dimensions for your sketch. *(meet the requirements below and turn this in)*

* Overall height of 7.89”
* Base width of 3.94”
* Flange thickness of 0.205”
* Web thickness 0f 0.17”
* All internal corners have a radius of 0.125”
* Extruded to a 3-inch length of I-beam

I-Beam properties taken from:

<http://www.efunda.com/math/areas/RolledSteelBeamsW.cfm>

**For assignment requirements, see the assignment checksheet. Be sure to give proof of each checksheet item in your submission and include the checksheet as your assignment cover page.**