Problem Set 6   Advanced Geometry   Due 3/20/2015

Each problem is worth 2 points. Clear and complete justification is required for full credit. You are welcome to discuss these problems with anyone and everyone, but must write up your own final submission without reference to any sources other than the textbook and instructor.

1. Construct a circle in GeoGebra.

2. Construct an acute angle in GeoGebra, and then trisect it.

3. Construct a segment in GeoGebra and then find its midpoint.

4. Construct a square in GeoGebra.

5. We know that for a convex quadrilateral the sum of the internal angles is less than or equal to 360°. Explore what happens with quadrilaterals that are not convex, with the understanding that we'll use the external angle for the corner where the internal "angle" is greater than 180°.