Problem Set 9 Advanced Geometry Due 4/27/2015

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.

In all cases, for full credit your construction should be based on an arbitrary segment or angle, i.e. I should be able to adjust at least one of the endpoints of your segment and have the construction adjust to suit my new position.

- 1. Use GeoGebra to illustrate a solution to Construction Problem 9.2.2.
- 2. Use GeoGebra to illustrate a solution to Construction Problem 9.2.3.
- 3. Use GeoGebra to illustrate a solution to Construction Problem 9.2.4.
- 4. Use GeoGebra to illustrate a solution to Construction Problem 9.2.9.
- 5. Use GeoGebra to illustrate the construction of a regular hexagon, given a segment which is to be one of its edges.