**Chapter 5 Review Problems**

1. **Construct the center of the circle and finish the circle.**
2. **Construct the centroid of a triangle (know how to construct ALL 4 points of concurrency).**
3. **Write the equation for the median of Triangle ABC from vertex C if A(0,0), B(6,8), C(12,0).**
4. **Write the equation of the perpendicular bisector to BC in Triangle ABC in #3.**
5. **Given the midpoints of the sides: (1, 2), (4, 6), and (6, 0), find the 3 vertices of the triangle.**
6. **J is the Centroid of Triangle ABC. Find the length of the following segments.**

**7) a) Draw a figure/example of the Hinge Theorem.**

**B )Draw a figure or example of the Converse Hinge Theorem.**

**9) Fill in the blank.**

1. **Perpendicular bisectors are concurrent at a point called the\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ that is equidistant from the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and located \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in an obtuse triangle.**
2. **The centroid is the center of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in a triangle.**
3. **In an \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ triangle all four points of concurrency are collinear.**
4. **A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the point of concurrency of the altitudes in a triangle and is located\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_in an acute triangle.**