MPM2D Analytic Geometry Name:_____

Quiz #1

1. **Given that the vertices of triangle ABC are A(0,0), B(4,4), and C(8,-4) :**
   a. Determine the equation of the altitude passing through vertex A.
   b. Determine the equation of the right bisector of AB.

2. Calculate the **length**, **slope** and **midpoint** for line segment CD given $C(-3,-3)$ and $D(4,-5)$

3. **Explain** how you would verify that a triangle is isosceles and right angled given the three vertices.