**Honors Geometry 9-Point Circle Extra Credit**

 *In geometry, the* ***nine-point circle*** *is a circle that can be constructed for any given triangle. It is so named because it passes through nine significant points. They include:*

 *• The midpoint of each side of the triangle*

 *• The foot of each altitude*

 *• The midpoint of the segment of each altitude connecting its vertex to the orthocenter (where the three altitudes meet).*

*The center of the circle is the midpoint of the segment connecting the circumcenter to the orthocenter.*

Construct a scalene triangle with the “nine point circle” also known a the “Euler circle.” This must be done as a compass and straight edge construction. Use BLANK paper.

 Your construction should include:

* perpendicular bisectors, circumcenter and circumscribed circle
* altitudes, orthocenter
* nine points and circle
* good use of **color** and line weight

