**Constructions Unit Worksheet #3** 

Name \_\_\_\_\_

MGE.ALT 5: I am able to use a variety of tools and methods to construct basic geometric figures.

MGE.AST 5.3: I can construct an equilateral triangle, a square, and a regular hexagon inscribed in a circle.

MGE.AST 5.4: I can construct the inscribed and circumscribed circles of a triangle.

Examine the definitions of centroids, circumcenters, orthocenters, and incenters from the worksheet completed in the last class, and refer to the constructions in your construction notebook.

1. Finding either the centroids, circumcenters, orthocenters and incenters, will allow you to *inscribe a circle in a triangle*. Determine which one of four is the basis of *inscribing a circle in a triangle* and explain why you know it will work.

2. Finding either the centroids, circumcenters, orthocenters and incenters, will allow you to *circumscribe a circle about a triangle*. Determine which one of four is the basis of *circumscribing a circle about a triangle* and explain why you know it will work.