## Honors Geometry Fall POW #9 Due Monday November 25<sup>th</sup>, 2019 at the beginning of class.

## **Euler Island**

On the triangular island of Euler, treasures are hidden in various spots around the island. Bars of gold are hidden at the intersection of the angle bisectors of the island. Silver coins are hidden at the intersection of the medians. Rubies are hidden at the intersection of the altitudes and sapphires are hidden at the intersection of the perpendicular bisectors of the island.

Perform the necessary constructions on the map of the island given to you in class. Label each treasure location and show which straight line will collect the most treasures by drawing a line through the points of the treasures.
<u>Constructions must be neat, accurate and visible</u>. Do not erase construction marks.

## Write up:

If you are only allowed to travel in one linear path, what is the largest number of treasures you can collect and which treasures are they? Explain why this happens. Write a paragraph discussing your findings. It is not necessary to describe the construction methods used.

## **Grading Criteria:**

You will be graded on the accuracy of your constructions and the discussion of your findings.

You must also include a key to color code the jewels that you have found using your constructions. (ie – sapphires are blue, then color them blue...)

