**Patio Design Project**

1) In this activity you design a patio (from the top view) in which you will need to use all of different shapes listed below:

**Rectangle, Trapezoid, Triangle, Circle**

2) The will need to use the following geometric construction techniques:

**Perpendicular Line Through a Point, Parallel Line Through a Point, Circle with a Compass**

3) You will need to list all measurements needed for the area of the patio; included measurements removed from patio; for example a fire pit or space for a tree/greenery to pass through.

4) You have a budget of $10,000 for the patio.

5) You can research cost of supplies (wood, concrete, pavers, bricks, etc.) Please use a scale of 1 inch to represent each foot of your patio.

6) For full credit you must provide the total area of your patio as well as a breakdown of the supplies needed for the project so that it will come in under budget.