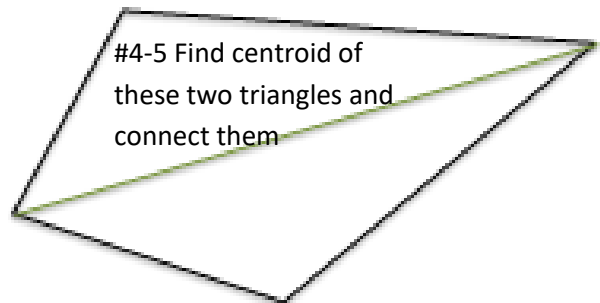
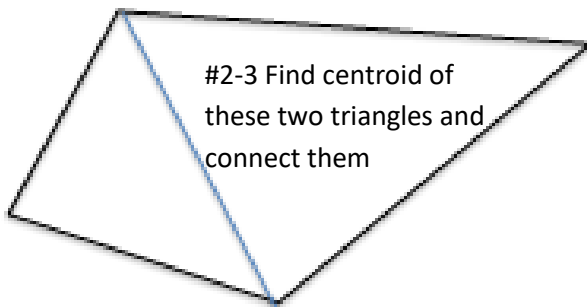


# POW #6 – Centroid of a Quadrilateral

Due Monday 3/11 at the start of class

Your task is to create a **large** irregular quadrilateral on a piece of **cardstock or cardboard**. Use construction techniques to find the centroid. Your quadrilateral should take up at least half a page.

1. Draw a large irregular quadrilateral on **cardstock** (not a square or rectangle).
2. Break the quadrilateral into two triangles. Find the centroid of each triangle.
3. Draw a line connecting these two centroids.
4. Break the quadrilateral into two different triangles. Find the centroid of each triangle. (it may help to do this in a different color.)
5. Draw a line connecting these two centroids.
6. Draw a line from the intersection of the first two centroids to the intersection of the second two centroids. The intersection of these two lines will be the centroid of the quadrilateral.
7. Cut out your quadrilateral and test your centroid as a balance point.
8. Put a string through the centroid of your quadrilateral and hang it so that the shape balances parallel with the floor. Decorate the side of your quadrilateral that is facing the ground.



Do not erase lines that show the construction of your centroids. This will be part of your grade in addition to how well the figure balances.

### **Write up:**

Explain if there were any challenges that you encountered throughout this process. Was it hard to find the centroid? Was it hard to get the quadrilateral to balance once it was on a string? How did you approach and solve these challenges?

(You do not need to explain the construction steps in finding the centroid)

[Further instructions for finding the centroid of the quadrilateral are also posted on my website.](#)