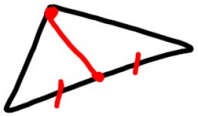
MPM 2D
Mr. Kempe

Class Notes
Unit 2, Lesson 12

Circumcentre, Orthocentre, Centroid

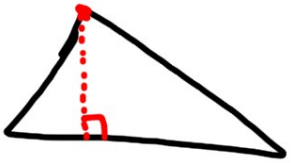
Definition recall:

A **median** is a line that connects a vertex of a triangle to the midpoint of the opposite side.

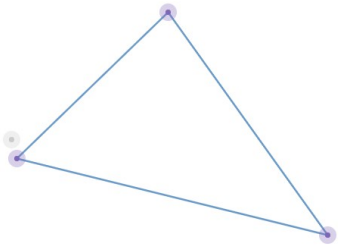


A **perpedicular bisector** is a line that intersects a line segment's midpoint at a right angle.

An **altitude** a line drawn from a vertex that is perpendicular to the opposite side. (The "height" of the triangle.)



Desmos Geometry Activity

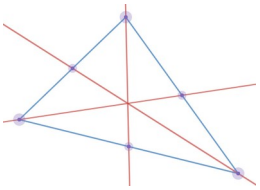


Create a new triangle in the Desmos Geometry, and add…

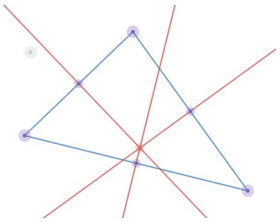
a. All three medians. What do you notice?
b. All three perpendicular bisectors. What do you notice?
c. All three altitudes. What do you notice?

Summary of Activity

The three medians of a triangle meet in a single point called the **centroid**. (This is the "balance point" of a triangle.)



The three perpendicular bisectors of a triangle meet in a single point called the **circumcentre**. (This point is equidistant from all three vertices; you can draw a circle with this point as its center that will touch all three vertices.)



The three altitudes of a triangle meet in a single point called the **orthocentre**.