

Please have your Centroid packet on your desk.

Start on new packet - You will need graph paper, straightedge, + calculator.

Midpoint of \overline{AB}

$$A = (-8, 6)$$

$$B = (10, -2)$$

$$\left(\frac{-8 + 10}{2}, \frac{6 + (-2)}{2} \right)$$

$$(1, 2) \rightarrow \text{label } M$$

11-10. Triangle centers

Centroid---point of concurrency of the **MEDIANS**

Circumcenter--- point of concurrency of the **PERPENDICULAR BISECTORS**

Incenter--- point of concurrency of the **ANGLE BISECTORS**

orthocenter--- point of concurrency of the **ALTITUDES**

median-- segment that connects a vertex to the midpoint of the opposite side (in a triangle)

Perpendicular BISECTORS-- line or segment that divides a segment into two congruent pieces at a 90 degree angle.

angle **BISECTORS**-- line that divides an angle into two congruent angles

Altitude-- (height) the perpendicular distance from a vertex to the opposite side in a triangle.

Concurrent-- lines that intersect in the same point

Point of concurrency --- point where concurrent lines intersect

$$\textcircled{5} \quad y - y_1 = m(x - x_1)$$

$$M = (1, 2) \quad m_{\perp} \text{ for } AB = \frac{9}{4}$$

$$y - 2 = \frac{9}{4}(x - 1)$$

$$y - 2 = \frac{9}{4}x - \frac{9}{4}$$

$$y = \frac{9}{4}x - \frac{1}{4}$$

Also $N \rightarrow \vec{n} \perp$ to BC

And P and L to AC