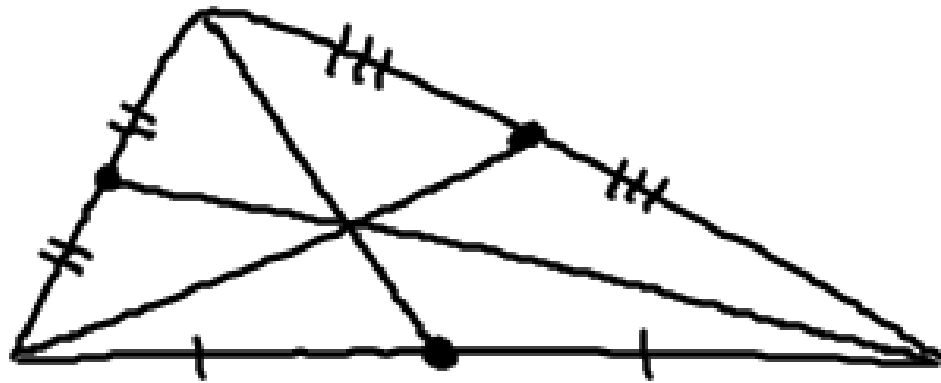
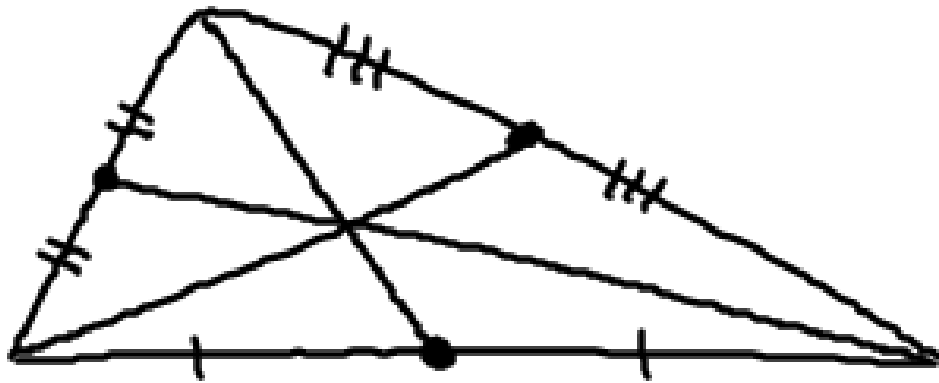


5-1 Day Two

median: segment from a vertex to the midpoint of the opposite side

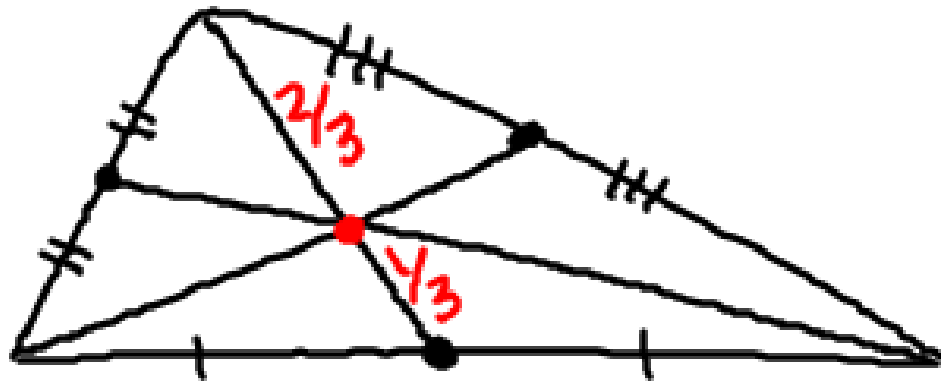


Centroid: P.O.C for medians of a Δ

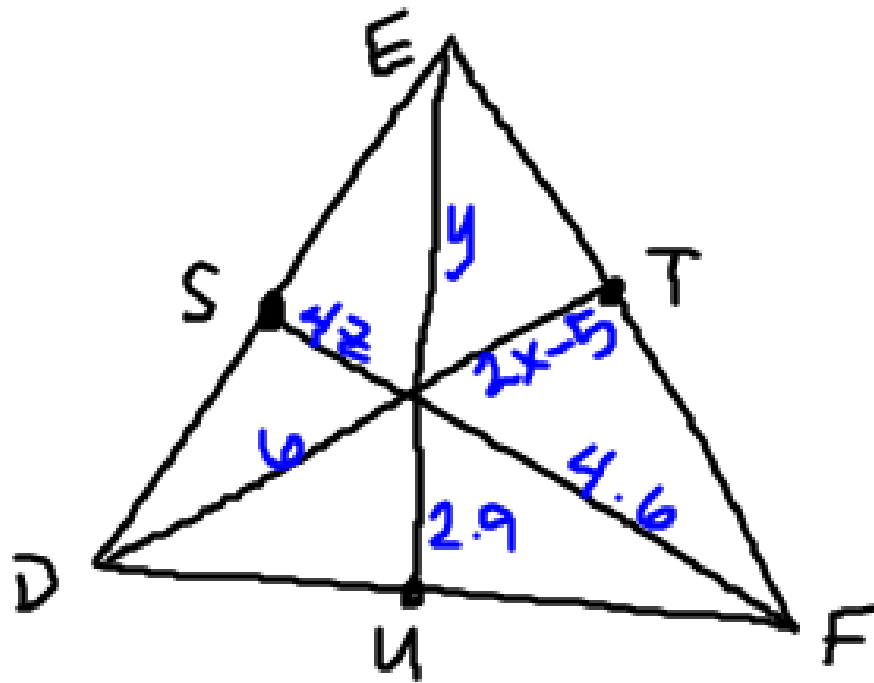


Thm 5.7 (Centroid Thm):

located $\frac{2}{3}$ of the way down
the median from the vertex



$$\text{short} = \frac{1}{2} \text{long}$$



$$2x - 5 = 3$$

$$+5 \quad +5$$

$$2x = 8$$

$$x = 4$$

$$\frac{4z}{4} = \frac{2.3}{4}$$

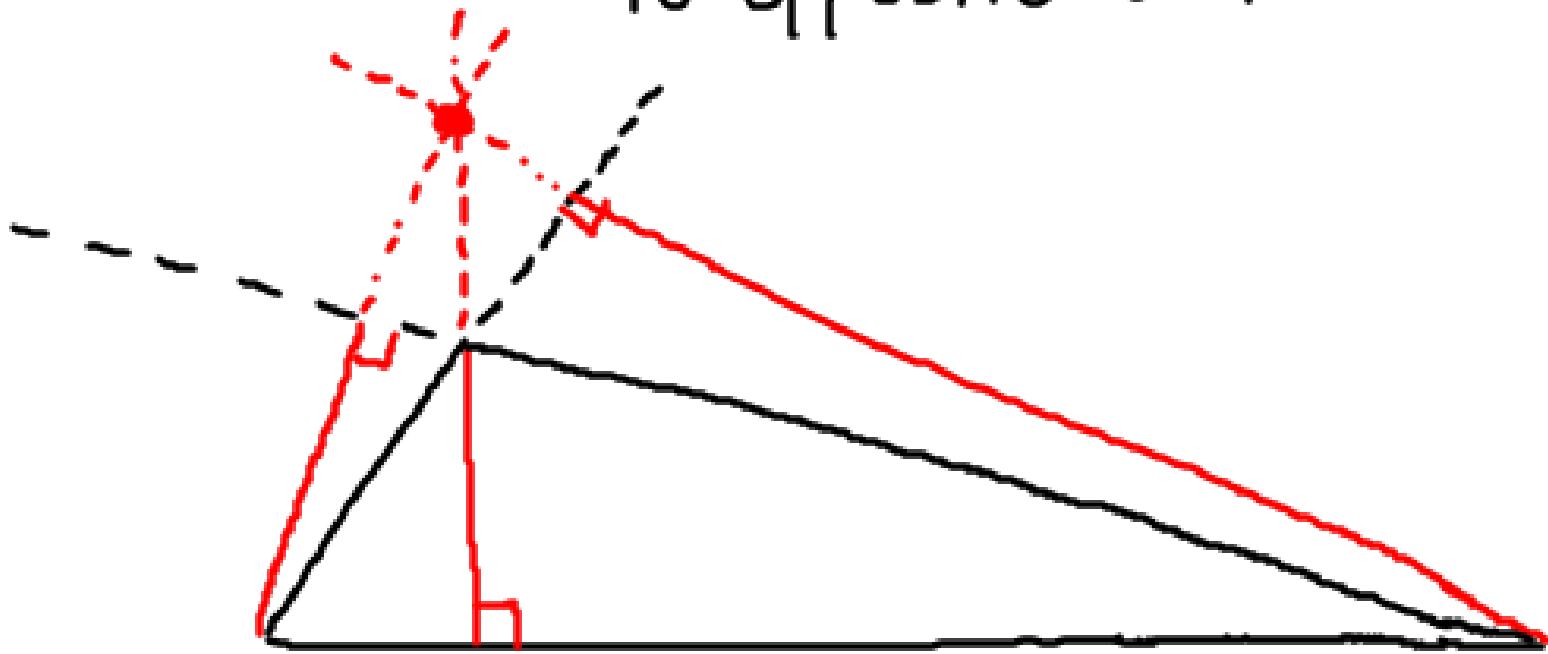
$$z = .575$$

$$x = 4$$

$$y = 5.8$$

$$z = .575$$

altitude: \perp segment from vertex
to opposite side



orthocenter: P.O.C. of altitudes of a Δ

* not necessarily in the interior

- Circumcenter - equidistant from all vertices
- Incenter - equidistant from all sides
- Centroid - located $\frac{2}{3}$ of way down median from vertex
- Orthocenter - not necessarily in interior