Name_____ Date _____
Lesson 1.6: Special Lines in a Triangle CC Geometry

Definitions:

Midpoint: A point on a line segment which is equidistant from each endpoint.

Median: Connects any vertex of a triangle to the midpoint on the opposite side.

Altitude: A line drawn from any vertex of a triangle perpendicular to the opposite side.

Median Vocabulary Must Knows:

- The point of intersection for the 3 segments is called the _

_____.

- This point is the _____of the triangle.
- This point splits the medians of a triangle into two smaller segments. These segments are **always** in a _____ ratio. The point is **always** closer to the side of the triangle (and further away from the angle).

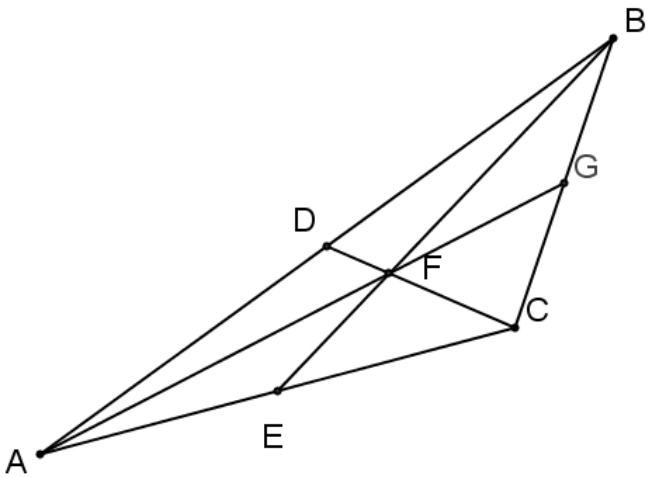
Practice Problems

1. In the figure pictured, $DF = 4$, $BF = 16$, and $AF = 30$. Find the lengths of:

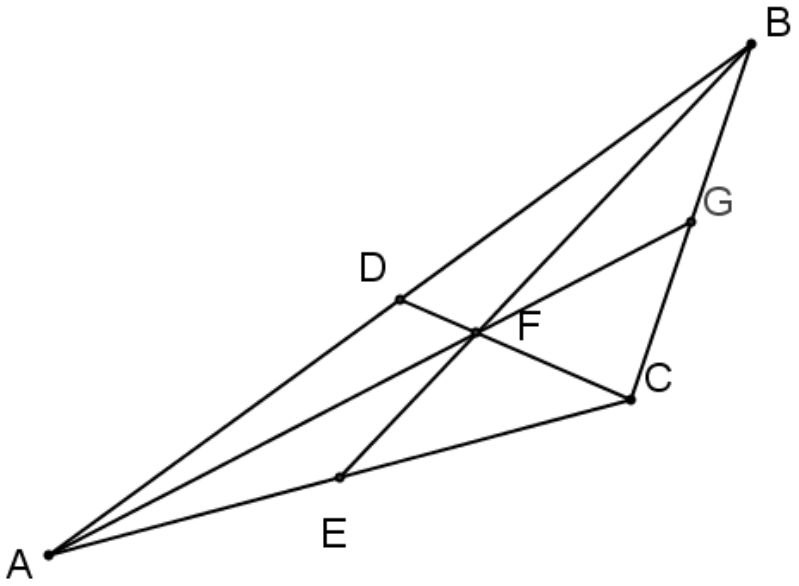
   a. $CF=$

   b. $EF=$

   c. $GF=$



2. In the figure at the right, $EF = x + 3$ and $BF = 5x - 9$. Find the length of EF.



3. In the figure at the right, $DC = 15$. Find DF and CF.