## Video Notes: 5.4 Medians and Altitudes

Aim\#49: How can we use our knowledge of medians and altitudes to describe the centroid and orthocenter of a triangle?
Learning Target(s): I am able to identify and use the median and altitude of a triangle.
I am able to identify and use the centroid of a triangle to solve problems.
I am able to identify and use the orthocenter of a triangle to solve problems.
As you are watching the video and taking notes, please make sure to write down any questions you have

| Guiding Questions | Notes/Diagrams/Illustrations |  |
| :---: | :---: | :---: |
| What is a median? | a______ from a ___ to the |  |
|  | $\ldots$ | of the opposite_________ |

Describe the concurrency of medians

The $\qquad$ of a triangle intersect at a $\qquad$ that is


How can we solve problems using the centroid?

What is an altitude?
of the distance from each $\qquad$ to the
$\qquad$ of the opposite side.

The medians of $\triangle A B C$ meet at $\qquad$ and $A P=$ $\qquad$ $B P=$ $\qquad$
$C P=$ $\qquad$

1. In $\Delta F G H, \mathrm{M}$ is the centroid and $G M=6$. Find $M L$ and $G L$.

2. Suppose $F M=10$. Find $M K$ and $F K$.


How can we solve problems using the orthocenter?

the $\qquad$ segment from a $\qquad$ to the opposite $\qquad$ or to the line that contains the opposite $\qquad$

The $\qquad$ containing the $\qquad$ of a triangle are

The lines containing $\qquad$ , $\qquad$ and $\qquad$ meet at $\qquad$ .

Find the orthocenter $P$ in the triangle.

b.

c.


