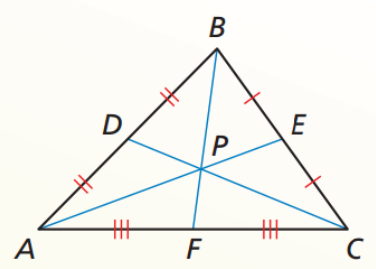
Altitudes of a Triangle and Orthocenter Theorem			Medians of a Triangle and Centroid Theorem
Orthocenter Examples			Centroid Examples

Median of a Triangle

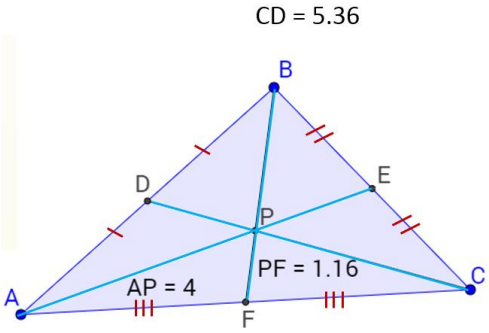
The median of a triangle is a segment from a _____ to the _____.

The three medians of a triangle are concurrent. The point of concurrency, called the _____, is _____ the triangle.



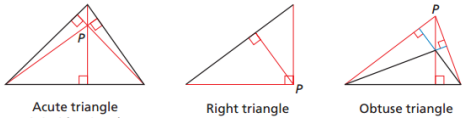
Centroid Theorem

The centroid of a triangle is _____ of the distance from each vertex to the _____ of the opposite side.



Orthocenter

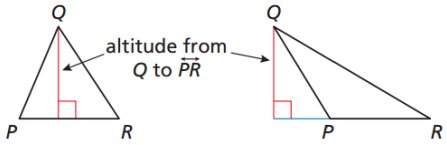
The lines containing the altitudes of a triangle are concurrent. This point of concurrency is the orthocenter of the triangle. The lines containing $\overline{AF}$, $\overline{BD}$and $\overline{CE}$ meet at the orthocenter G of $\triangle ABC$.



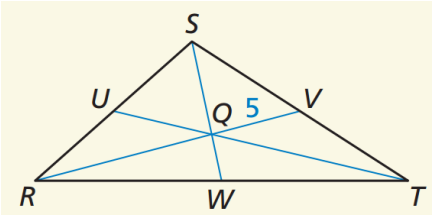
Acute triangle | Right triangle | Obtuse triangle

Altitude of a Triangle

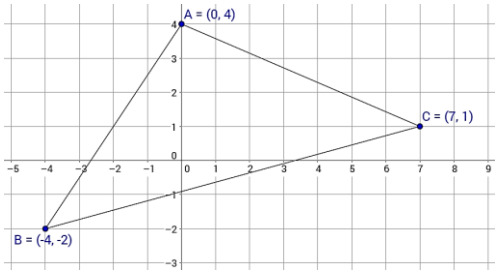
An altitude of a triangle is the - _____ from a _____ to the opposite side or to the line that contains the opposite side.



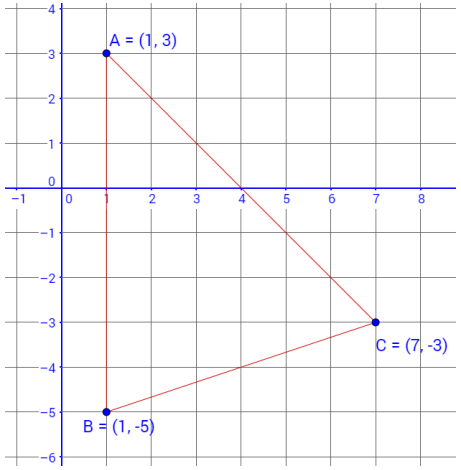
In $\triangle RST$, point Q is the centroid, and VQ = 5. Find RQ and RV.



Find the coordinates of the centroid of $\triangle ABC$ with vertices A(0, 4), B(−4, −2), and C(7, 1).



Find the coordinates of the orthocenter for $\triangle ABC$ with vertices A(0, 3), B(0, −2), and C(6, −3).



Find the coordinates of the orthocenter of $\triangle DEF$ with vertices D(0, 6), E(−4, −2), and F(4, 6).