Median:

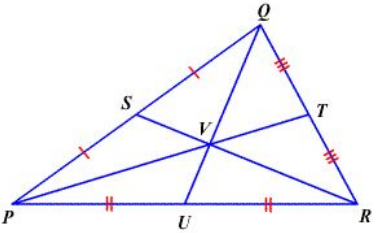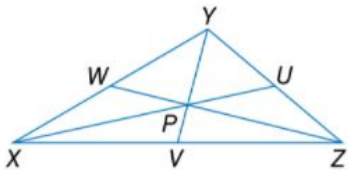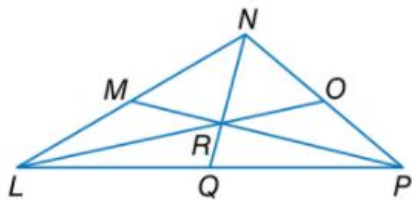**Centroid:**

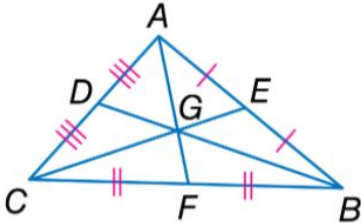| Centroid Theorem	The medians of a triangle intersect at a point called the centroid that is two thirds of the distance from each vertex to the midpoint of the opposite side	

3. In $\triangle XYZ$, $YV = 12$ and P is the centroid. Find $YP = $? and $PV = $?

4. In $\triangle LNP$, R is the centroid and $LO = 30$. Find $LR = $? and $RO = $?
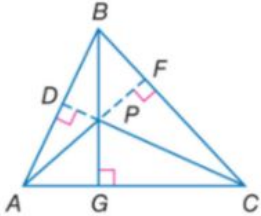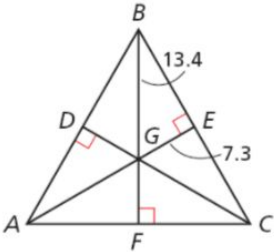
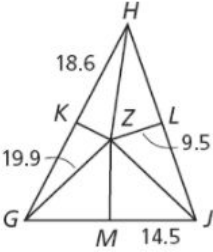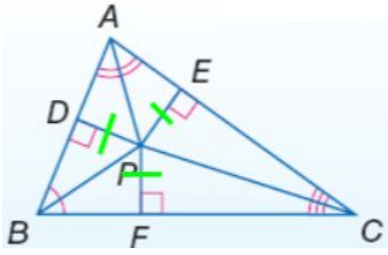2. In $\triangle ABC$ $CG = 4$. Find $GE =$

Altitude:

Orthocenter:

Circumcenter Theorem	The vertices of a triangle are equidistant from the circumcenter.	

3. G is the circumcenter of $\triangle ABC$.
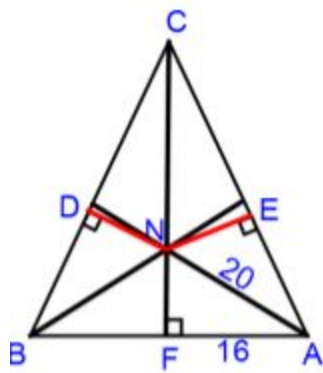   Find $GC =$

5. Z is the circumcenter of $\triangle GJH$.
   Find $GM =$

Incenter Theorem	The incenter of a triangle is equidistant from the sides of the triangle.	

6. N is the incenter of the triangle. Find ND:

7. In the figure point D is the incenter. Determine which segments are congruent to $\overline{DG}$.