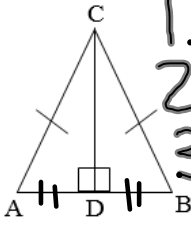


Welcome!! Please grab your ISN and have a seat! DO THIS ON PAPER- NO CHROMEBOOK TODAY!!!!

Give the three reasons the two triangles are congruent, then give the postulate

1. $\triangle ADC \cong \triangle BDC$ SSS

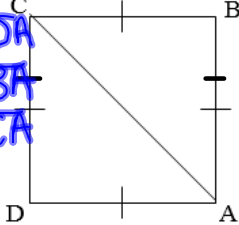
2. $\triangle ABC \cong \triangle CDA$ SSS



1. $\overline{CA} \cong \overline{CB}$ (s)

2. $\overline{AD} \cong \overline{DB}$ (s)

3. $\overline{CD} \cong \overline{CD}$ (s)



1. $\overline{CB} \cong \overline{DA}$

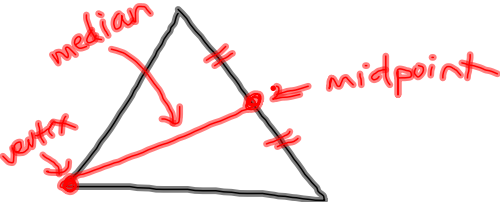
2. $\overline{CD} \cong \overline{BA}$

3. $\overline{CA} \cong \overline{CA}$

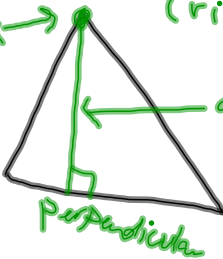
Oct 12-7:53 AM

WWK: (pg 33-34)

median a segment that goes from the vertex of a triangle to the midpoint of the opposite side.



altitude a segment that goes from the vertex of a triangle and is perpendicular to the opposite side.



Oct 12-8:26 AM

TOC 43-44 Altitudes and Medians

Altitude	Median
<ul style="list-style-type: none"> Goes from the <u>vertex</u> to the <u>opposite side</u> <u>perpendicular</u> to the opposite side, making it a <u>right angle</u> <u>outside</u> the triangle in an <u>obtuse</u> triangle All three altitudes meet at a point called the <u>orthocenter</u> 	<ul style="list-style-type: none"> Goes from the <u>vertex</u> to the <u>midpoint</u> of the opposite side DOES NOT <u>bisect</u> an angle unless it is given!! All three medians meet at a point called the <u>centroid</u>

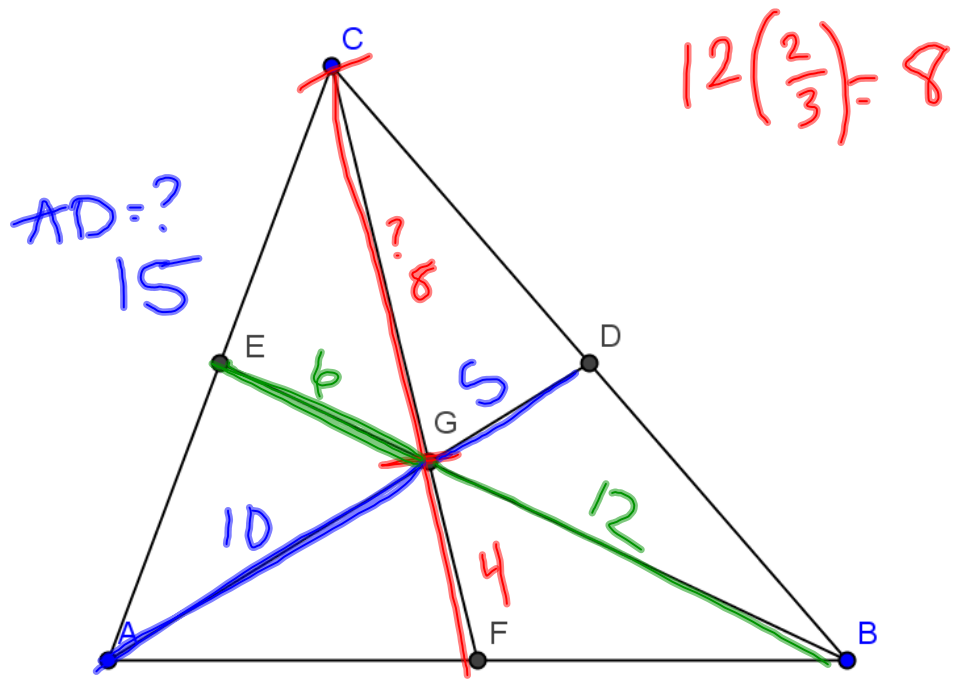
Oct 12-8:27 AM

Welcome!! Please grab your ISN and warmups and have a seat!

1. The _____ is the line segment that goes from the midpoint of a side to the opposite vertex of a triangle.
2. The _____ is the intersection of the medians.
3. The _____ is the line segment from the vertex of a triangle to the opposite side and forms a right angle.
4. The _____ is the intersections of the altitudes.
5. The orthocenter is outside the triangle on the _____ triangle.

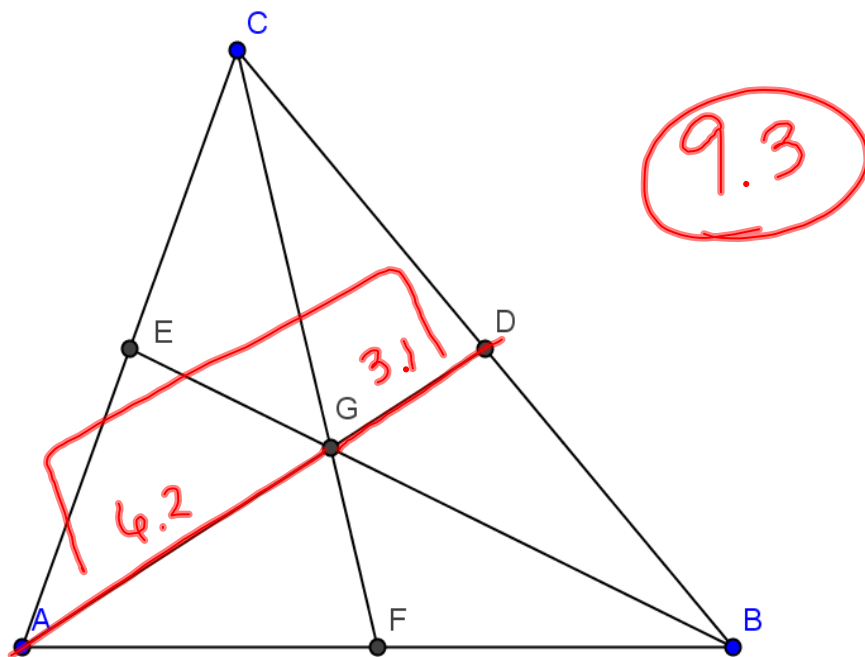
Oct 12-8:29 AM

Ex 1 (pg 43) Given $CF = 12$. Find CG



Oct 12-8:28 AM

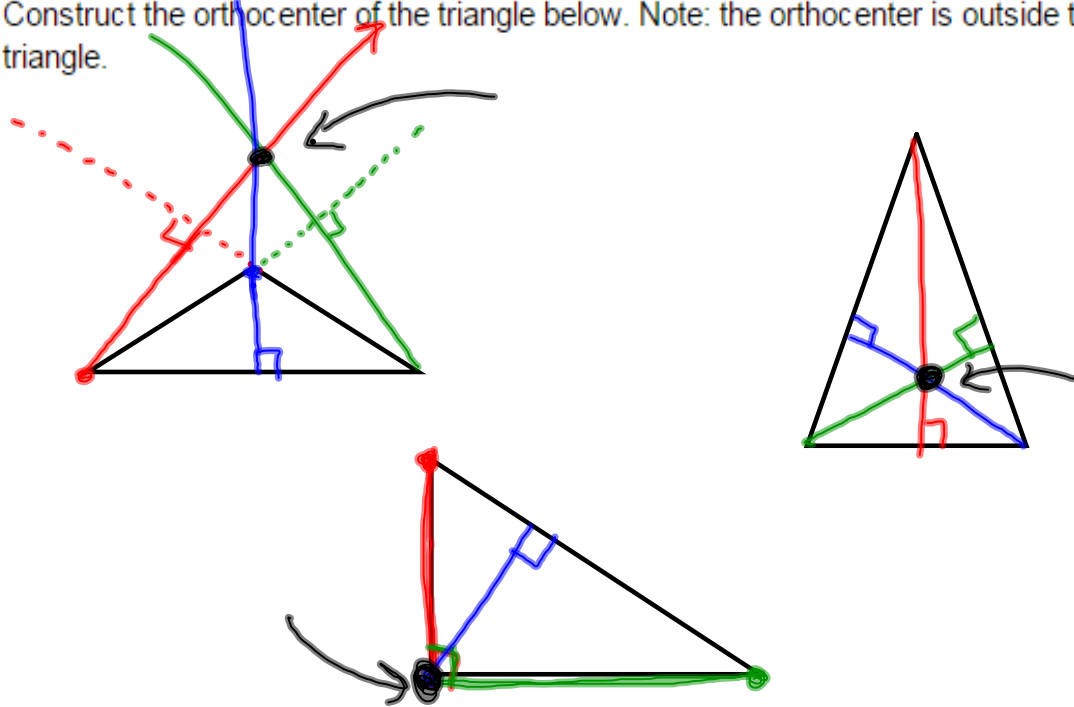
Ex 2 (pg 41) Given $DG = 3.1$. Find AD



Oct 12-8:29 AM

Ex 3 (pg 41)

2. Construct the orthocenter of the triangle below. Note: the orthocenter is outside this triangle.



Oct 12-8:30 AM

Fill in the blank.

11. The _____ is $\frac{2}{3}$ the distance of the median from the vertex.
12. The orthocenter is located outside the triangle in a(n) _____ triangle.
13. In a _____ triangle, altitudes are legs.

Oct 12-2:17 PM

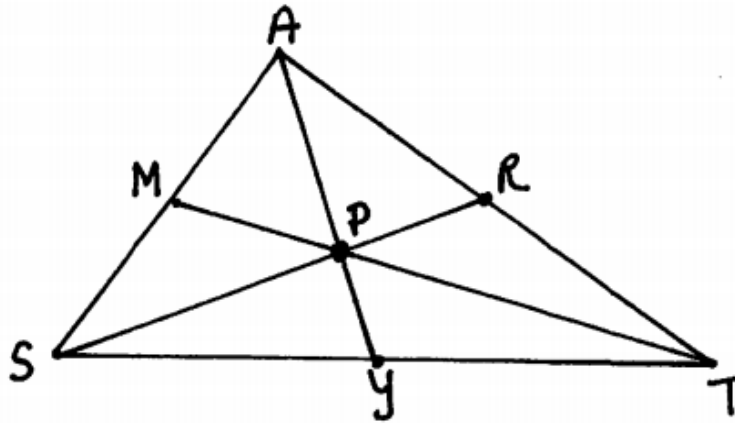
P is a centroid.

PR = 12

PT = 8

AR = 9

AY = 21



Find:

SP = _____

TM = _____

AT = _____

PY = _____

Oct 12-2:12 PM

D is the centroid of $\triangle ABC$, $\overline{AE} = 12$, $\overline{AD} = 10$, $\overline{CF} = 12$.
Find the length of each segment.

1.

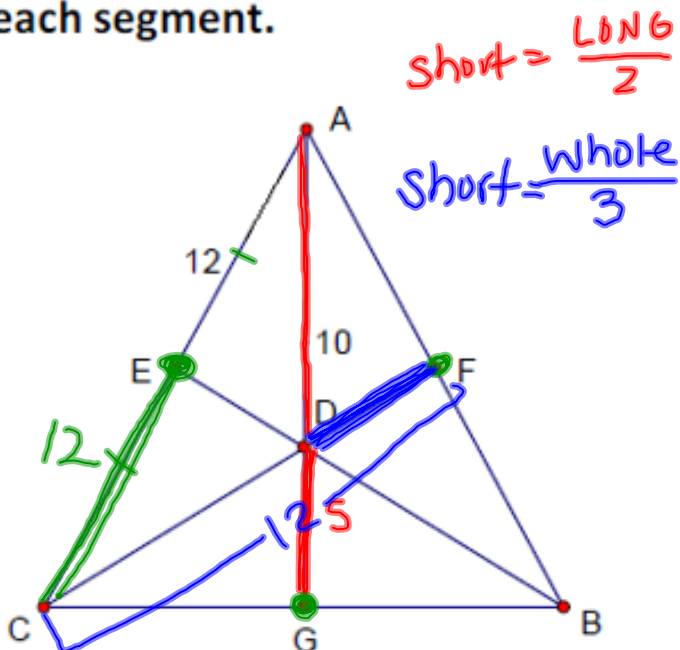
\overline{DG} 5

\overline{AG} 15

\overline{EC} 12

\overline{AC} 24

\overline{DF} 4

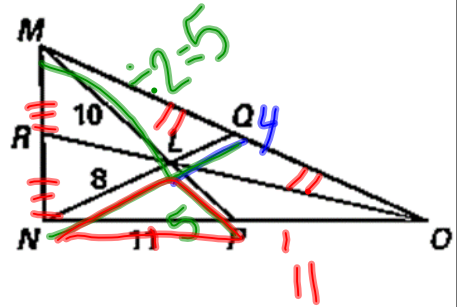


Oct 12-2:13 PM

Use the figure shown and the given information.

L is the centroid of $\triangle MNO$, $NP = 11$, $ML = 10$, and $NL = 8$.

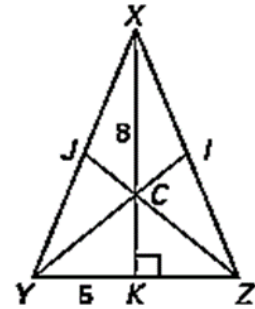
8. Find the length of \overline{PO} .
9. Find the length of \overline{MP} .
10. Find the length of \overline{LQ} .
11. Find the length of \overline{NQ} .
12. Find the perimeter of $\triangle NLP$.



Use the figure shown and the given information.

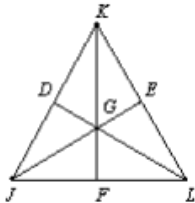
C is the centroid of $\triangle XYZ$, $YK = 5$, $XC = 8$, $YI = 9.6$ and $\overline{XK} \perp \overline{YZ}$.

13. Find the length of \overline{CK} .
14. Find the length of \overline{XK} .
15. Find the length of \overline{YC} .
16. Find the length of \overline{KZ} .
17. Find the length of \overline{JZ} .
18. Find the length of \overline{JZ} .
19. Find the perimeter of $\triangle XYZ$.



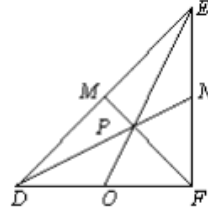
Oct 12-2:12 PM

In $\triangle JKL$, \overline{JE} , \overline{KF} , and \overline{LD} are medians.



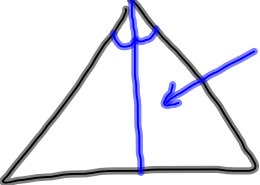
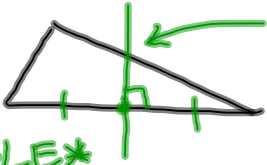
1. If $GF = 15$, then $KG =$ _____
2. If $JG = 13$, then $\overline{JE} =$ _____
3. If $JL = 22$, then $FL =$ _____
4. If $KE = 20$, then $KL =$ _____
5. If $DL = 24$, $\overline{LG} =$ _____
and $\overline{DG} =$ _____

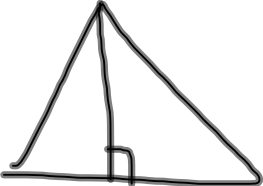
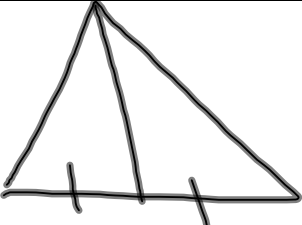
In $\triangle DEF$, \overline{DN} , \overline{EO} , and \overline{FM} are medians.



6. If $DE = 45$, then $DM =$ _____
7. If $PD = 20$, then $\overline{PN} =$ _____
8. If $DO = 8.5$, then $FD =$ _____
9. If $OE = 22$, $\overline{EP} =$ _____
and $\overline{OP} =$ _____
10. If $MP = 10$, then $PF =$ _____

Oct 31-9:50 AM

<p>Angle bisector Incenter</p>	<p>a segment that cuts an angle into 2 equal halves.</p>	
<p>Perpendicular bisector Circumcenter</p>	<p>a segment that cuts a side in half (midpoint) at a right angle * DOES NOT START AT ANGLE *</p>	

Dec 5-8:56 AM

<p><u>Orthocenter</u> intersection of the altitudes altitudes goes from vertex of \angle to opp side @ a \perp \angle.</p>	<p><u>Centroid</u></p>
<p><u>Circumcenter</u></p>	<p><u>Incenter</u></p>

Dec 5-9:15 AM



Dec 5-9:23 AM