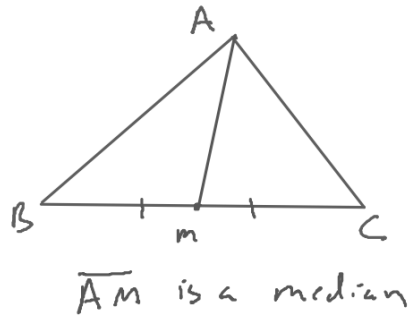


Median of a triangle -

Segment from a vertex to
the opposite sides midpoint



Centriod - Point of Concurrency where
the 3 medians Intersect.

Always on inside of Δ

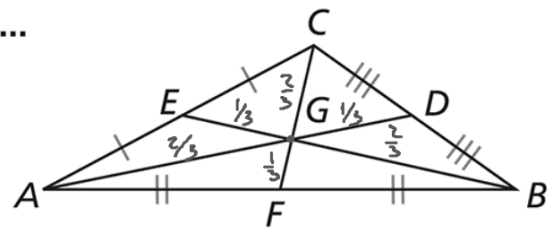
Center of Balance

Concurrency of Medians

The medians of a triangle are concurrent at a point that is two-thirds the distance from each vertex to the midpoint of the opposite side.

PROOF: SEE LESSON 9-2.

If...



Then...

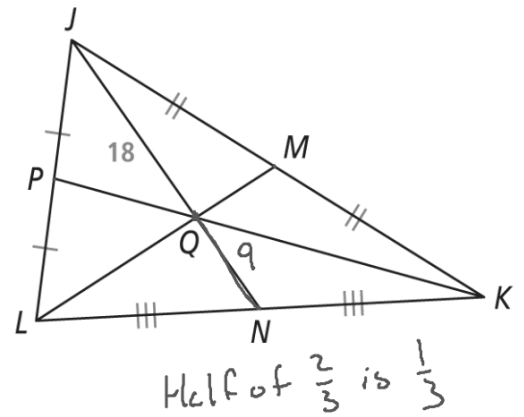
$$AG = \frac{2}{3}AD \quad BG = \frac{2}{3}BE \quad CG = \frac{2}{3}CF$$

What is the length of \overline{JN} in the figure?

SOLUTION

27

COMMON ERROR

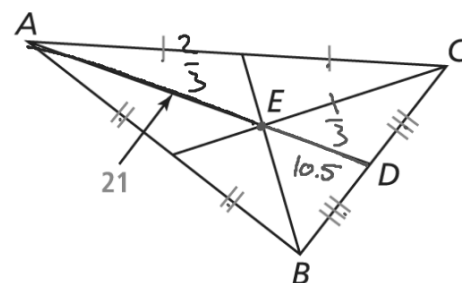


Find AD for the triangle.

Enter your answer.

$$21 + 10.5 =$$

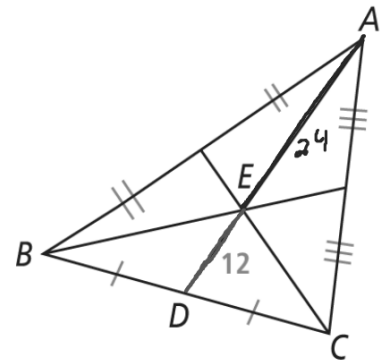
$$31.5$$



Find AD for the triangle.

Enter your answer. $24+12$
 36

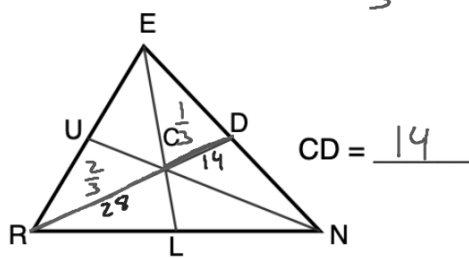
CHECK ANSWER



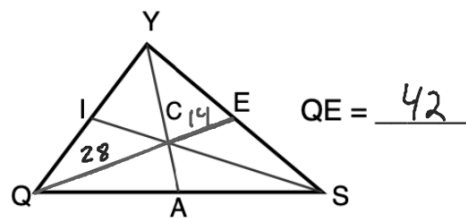
Each triangle shows all three of its medians drawn.

1) $RD = 42$. Find CD .

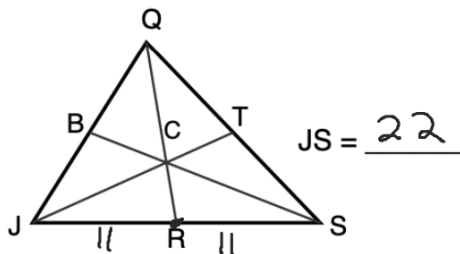
$$\frac{42}{3} =$$



2) $CE = 14$. Find QE .



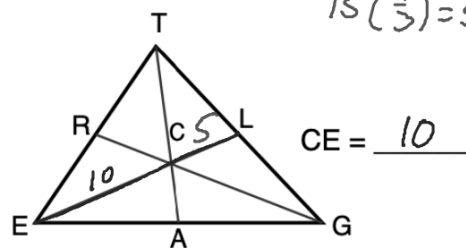
3) Find JS if $RS = 11$.



4) $EL = 15$. Find CE .

$$15\left(\frac{2}{3}\right) = 10$$

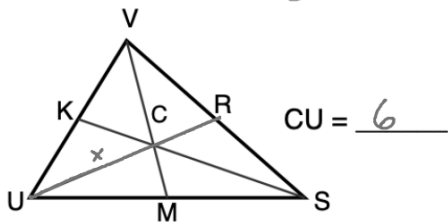
$$15\left(\frac{1}{3}\right) = 5$$



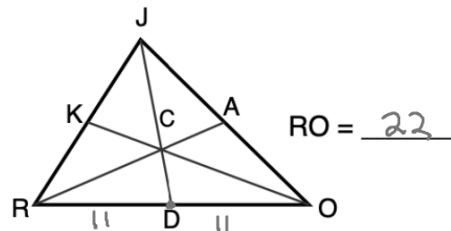
Each triangle shows all three medians drawn.

5) $UR = 9$. Find CU .

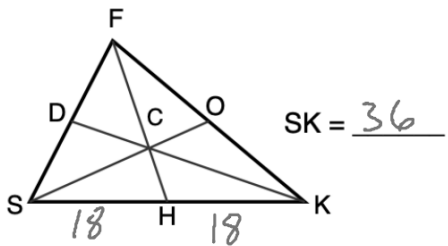
$$\frac{2}{3}(9) = 6$$



6) Find RO if $DO = 11$.

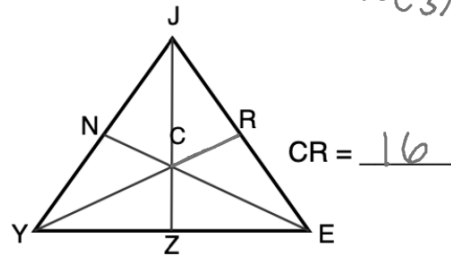


7) Find SK if $HK = 18$.



8) $YR = 48$. Find CR .

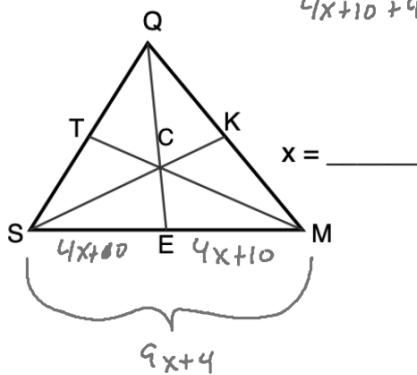
$$48\left(\frac{1}{3}\right) = 16$$



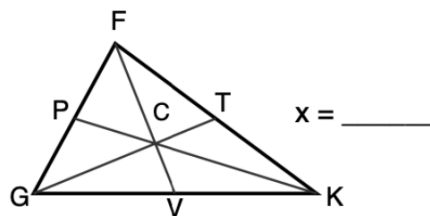
Each triangle shows all three medians drawn.

Find x if $EM = 4x + 10$ and $SM = 9x + 4$

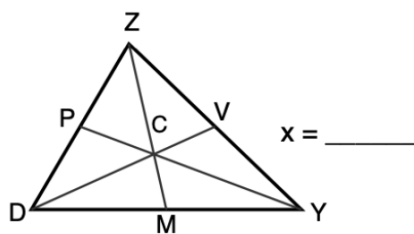
$$4x + 10 + 4x + 10 = 9x + 4$$



Find x if $VK = 4x + 10$ and $GK = 10x + 4$



Find x if $CV = 3x + 8$ and $DV = 11x + 4$



Find x if $CT = 2x + 9$ and $NT = 7x + 5$

