

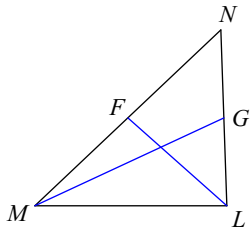
Day 2: Triangle Segments

Date _____

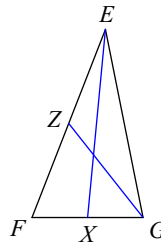
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Each figure shows a triangle with one or more of its medians.

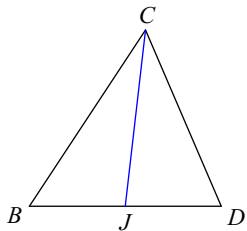
1) Find FM if $NM = 24$



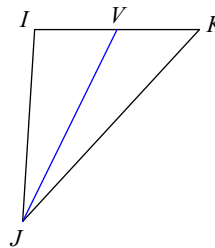
2) Find XG if $FG = 2$



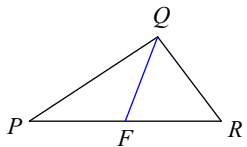
3) Find JB if $JD = 6.5$



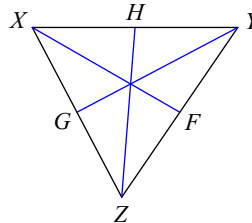
4) Find KI if $VI = 3.5$



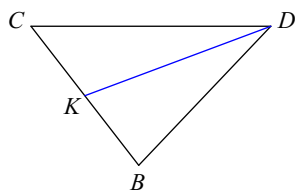
5) Find x if $PR = x + 9$ and $FR = 2x - 3$



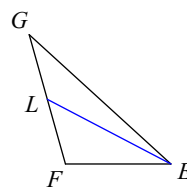
6) Find x if $HX = x - 4$ and $HY = 2x - 11$



7) Find x if $CB = x - 10$ and $KB = x - 11$

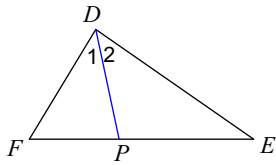


8) Find x if $GF = -6 + x$ and $LF = x - 8$

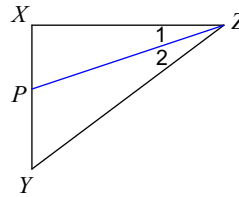


Each figure shows a triangle with one of its angle bisectors.

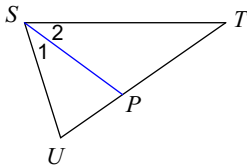
9) Find $m\angle FDE$ if $m\angle 2 = 43^\circ$.



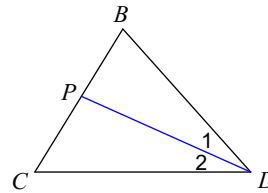
10) $m\angle XZY = 36^\circ$. Find $m\angle 2$.



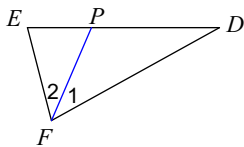
11) Find $m\angle UST$ if $m\angle 2 = 36^\circ$.



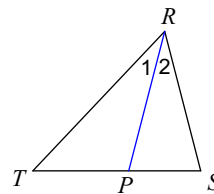
12) $m\angle BDC = 48^\circ$. Find $m\angle 2$.



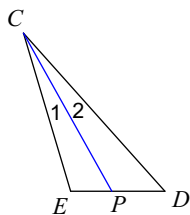
13) Find x if $m\angle 2 = 9x + 2$ and $m\angle 1 = 8x + 6$.



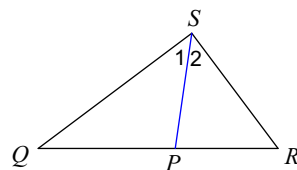
14) $m\angle 1 = 5x + 4$ and $m\angle TRS = 11x + 3$. Find x .



15) $m\angle 1 = 2x + 4$ and $m\angle 2 = 3x$. Find x .



16) $m\angle 2 = 4x + 9$ and $m\angle 1 = -9 + 6x$. Find x .



Midsegment

17) A line the connects the _____ of two sides of the triangle.

A midsegment is _____ to the third side and _____ the length.

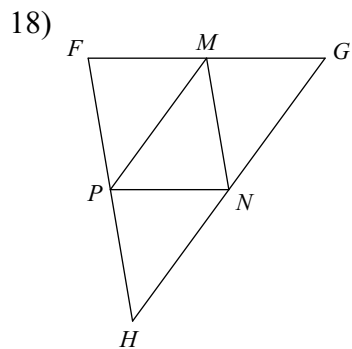
Draw a picture:

What happens if we connect all three midpoints?

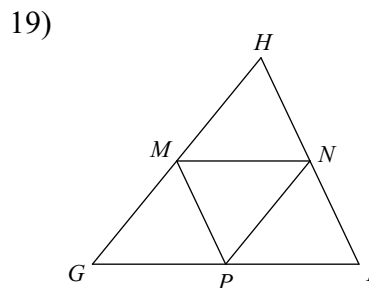
This is called a _____ triangle.

Now, let's try some problems!

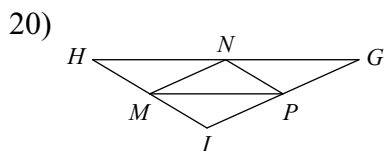
In each triangle, M, N, and P are the midpoints of the sides. Name a segment parallel to the one given.



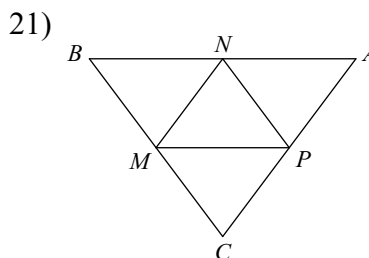
$\overline{NP} \parallel \underline{\hspace{1cm}}$



$\overline{MP} \parallel \underline{\hspace{1cm}}$



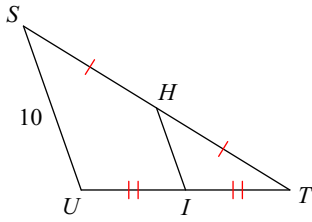
$\underline{\hspace{1cm}} \parallel \overline{IH}$



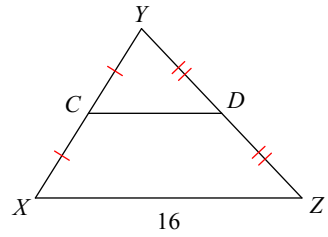
$\overline{CB} \parallel \underline{\hspace{1cm}}$

Find the missing length indicated.

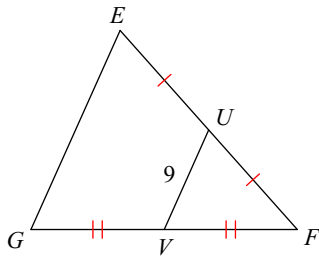
22) Find HI



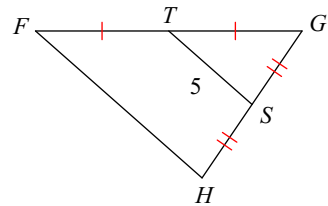
23) Find CD



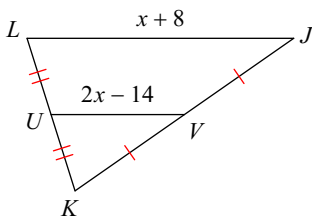
24) Find EG



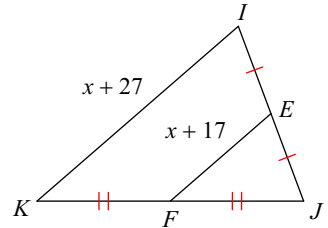
25) Find FH



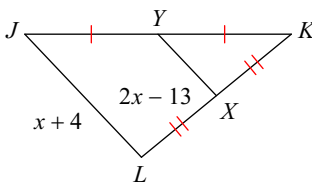
26) Find VU



27) Find EF



28) Find JL



29) Find HI

