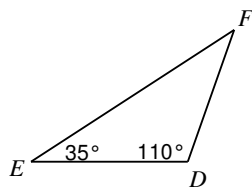


Triangle Properties Cumulative Review

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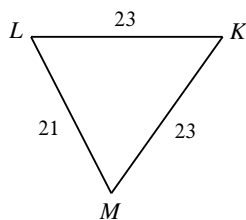
Order the sides of each triangle from shortest to longest.

1)



Order the angles in each triangle from smallest to largest.

2)



State if the three numbers can be the measures of the sides of a triangle.

3) 5, 6, 9

4) 9, 21, 11

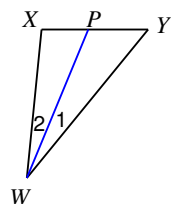
Two sides of a triangle have the following measures. Find the range of possible measures for the third side.

5) 12, 8

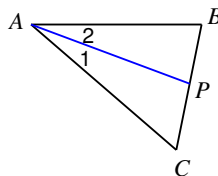
6) 8, 11

Each figure shows a triangle with one of its angles bisected. The bisected angles are marked as 1 and 2.

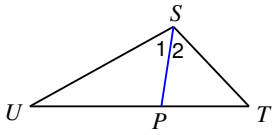
7) $m\angle 2 = 17^\circ$. Find $m\angle 1$.



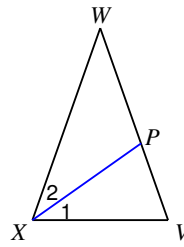
8) $m\angle 2 = 2x + 6$ and $m\angle CAB = 6x - 2$.
Find x .



- 9) Find $m\angle UST$ if $m\angle I = 9x - 2$ and $m\angle UST = 16x + 8$.

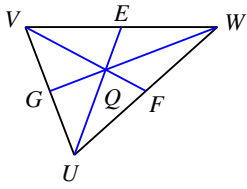


- 10) $m\angle 2 = 4x + 11$ and $m\angle VXW = 10x + 10$. Find $m\angle VXW$.

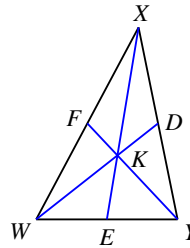


Each figure shows a triangle with one or more of its medians.

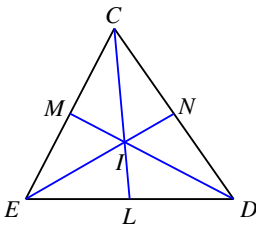
- 11) Find QG if $WG = 8.4$



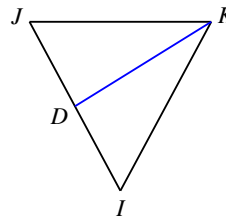
- 12) Find x if $WK = 2x - 12$ and $WD = x$



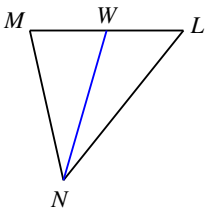
- 13) Find IL if $CI = 3x + 9$ and $IL = 2x + 2$



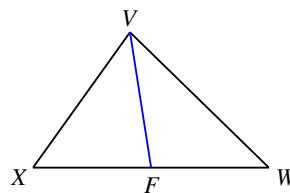
- 14) Find DI if $JI = 18$



- 15) Find x if $LM = 3x + 2$ and $WM = 2 + x$



- 16) Find FX if $FW = \frac{1}{2}x + 2$ and $FX = \frac{2x - 1}{2}$



Answers to Triangle Properties Cumulative Review

- | | | | |
|---|--|---------------|---------|
| 1) \overline{DF} and $\overline{DE}; \overline{EF}$ | 2) $\angle K; \angle M$ and $\angle L$ | 3) Yes | 4) No |
| 5) $4 < x < 20$ | 6) $3 < x < 19$ | 7) 17° | 8) 7 |
| 9) 104° | 10) 70° | 11) 2.8 | 12) 9 |
| 13) 12 | 14) 9 | 15) 2 | 16) 4.5 |