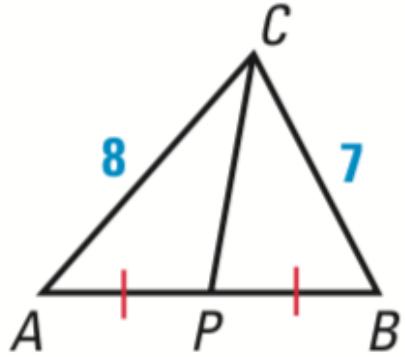


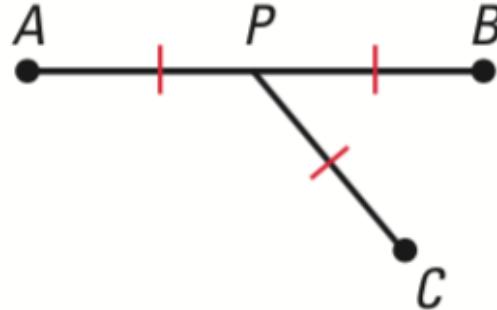
Chapter 5 Test Review

1)

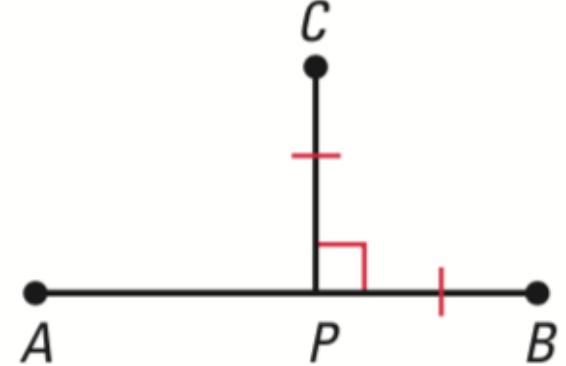
8.



9.



10.



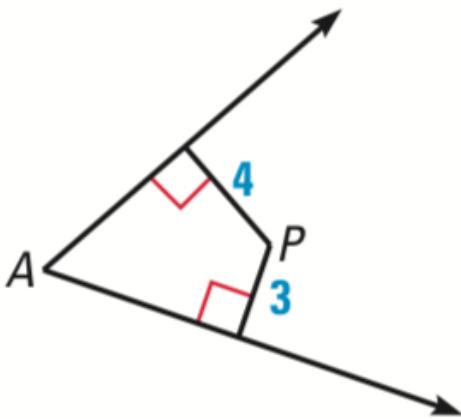
8 – no, CA and CB are not equal

9 – no, CA and CB are not equal

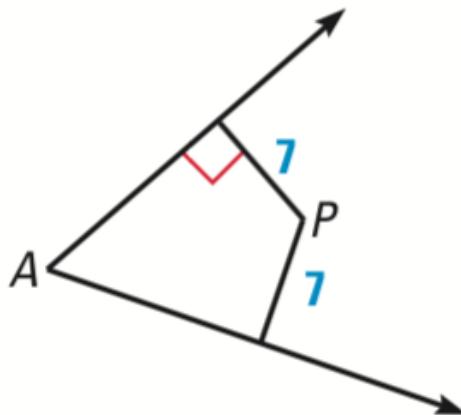
10 – no, CA and CB are not equal

2)

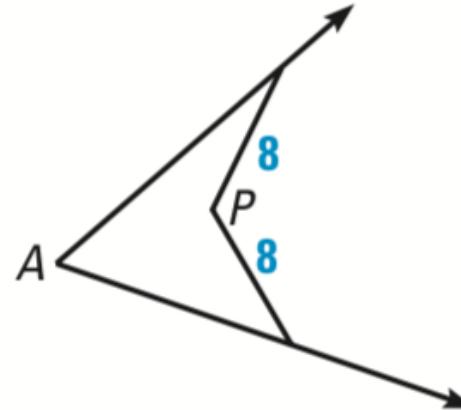
11.



12.



13.

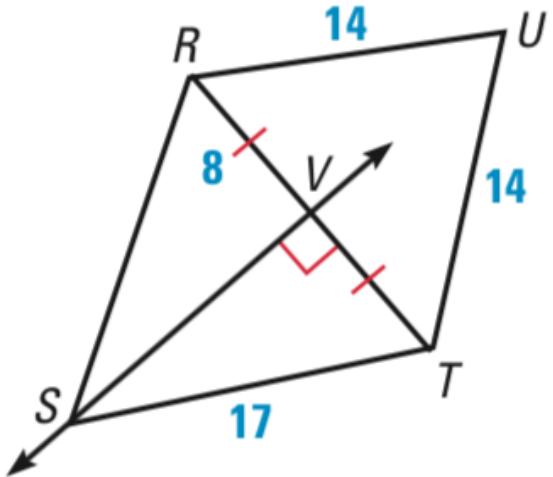


11 – no, P is not equidistant from the sides of $\angle A$

12 – no, diagram does not show both segments are perpendicular

13 – no, diagram does not show perpendicular segments

3)



16. In the diagram, $\overleftrightarrow{SV} \perp \overline{RT}$ and $\overline{VR} \cong \overline{VT}$. Find VT . 8

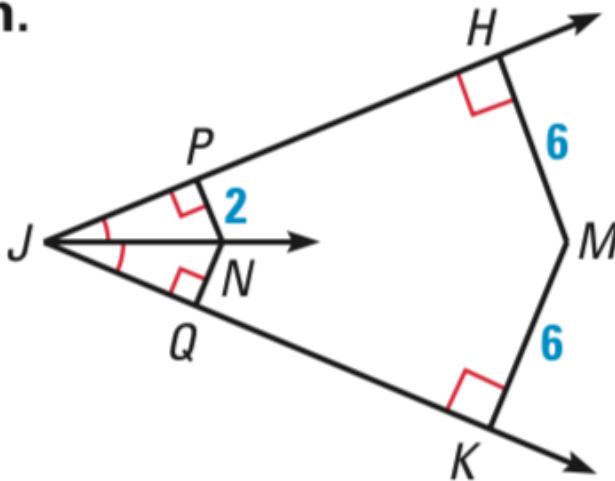
17. In the diagram, $\overleftrightarrow{SV} \perp \overline{RT}$ and $\overline{VR} \cong \overline{VT}$. Find SR . 17

18. In the diagram, \overleftrightarrow{SV} is the perpendicular bisector of \overline{RT} . Because $UR = UT = 14$, what can you conclude about point U ?

It is on SV ,
the \perp bisector
of \overline{RT}

4)

n.

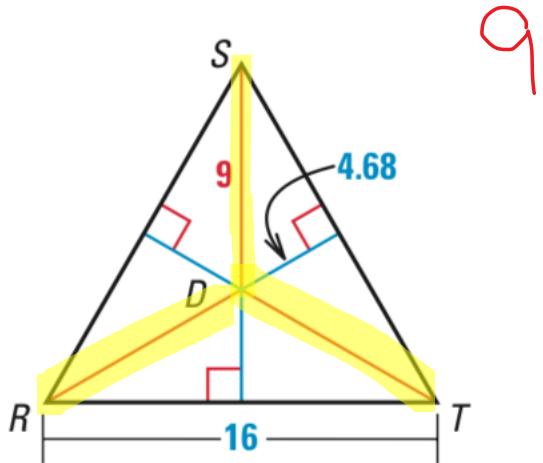


19. In the diagram, \overrightarrow{JN} bisects $\angle HJK$, $\overline{NP} \perp \overrightarrow{JP}$,
 $\overline{NQ} \perp \overrightarrow{JQ}$, and $NP = 2$. Find NQ . 2

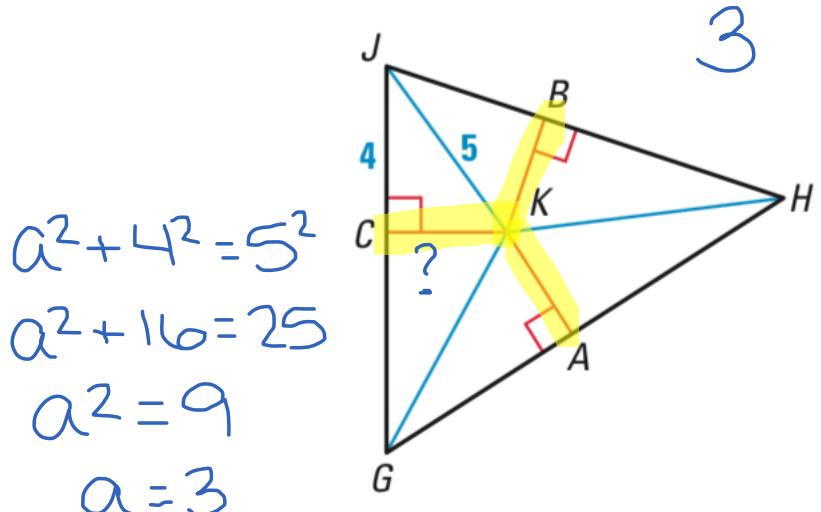
20. In the diagram, \overrightarrow{JN} bisects $\angle HJK$, $\overline{MH} \perp \overrightarrow{JH}$,
 $\overline{MK} \perp \overrightarrow{JK}$, and $MH = MK = 6$. What can
you conclude about point M?It is on JN,
the \angle bisector
of $\angle HJK$

5-8)

14. The perpendicular bisectors of $\triangle RST$ meet at point D . Find DR .

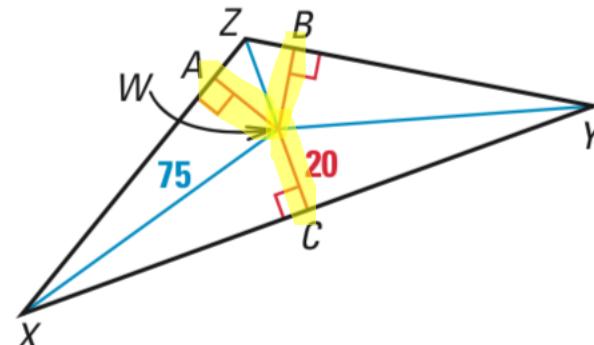


16. The angle bisectors of $\triangle GHJ$ meet at point K . Find KB .



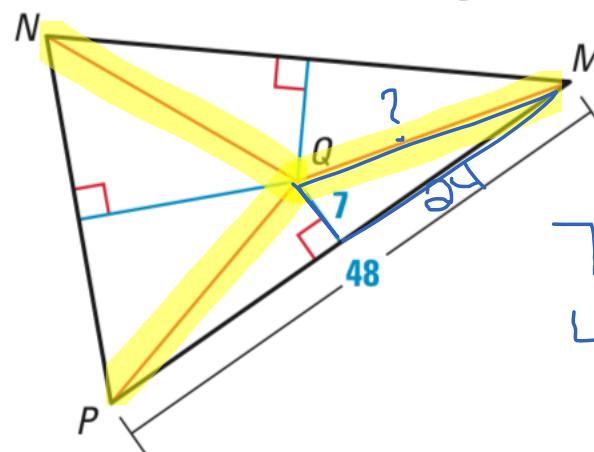
15. The angle bisectors of $\triangle XYZ$ meet at point W . Find WB .

20



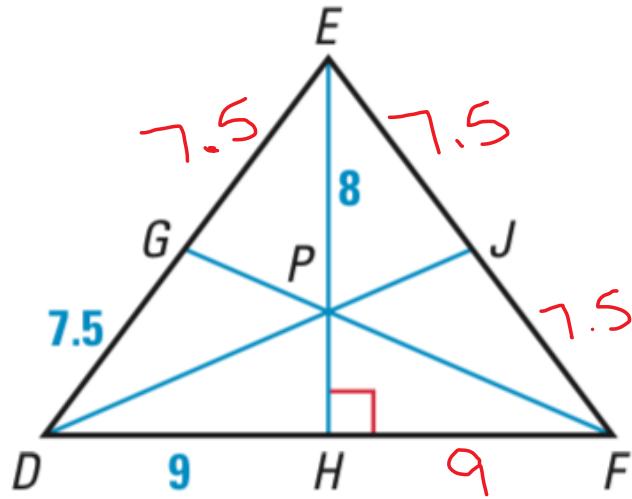
17. The perpendicular bisectors of $\triangle MNP$ meet at point Q . Find QN .

25



$$\begin{aligned} 7^2 + 24^2 &= c^2 \\ 49 + 576 &= c^2 \\ 625 &= c^2 \\ 25 &= c \end{aligned}$$

9)



P is the centroid of $\triangle DEF$, $\overline{EH} \perp \overline{DF}$,
 $DH = 9$, $DG = 7.5$, $EP = 8$, and $DE = FE$.

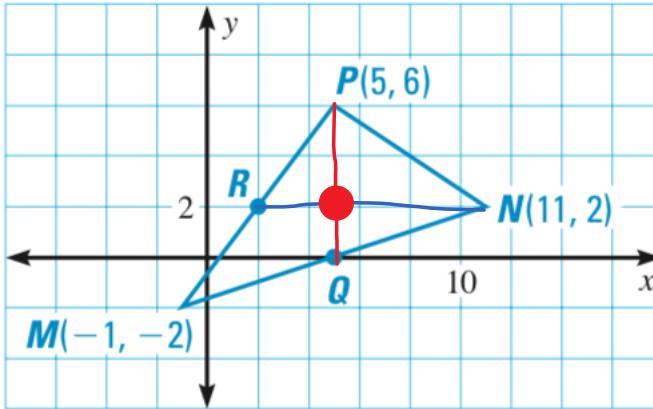
8. Find the length of \overline{FH} . 9

9. Find the length of \overline{EH} . 12

10. Find the length of \overline{PH} . 4

11. Find the perimeter of $\triangle DEF$. 48

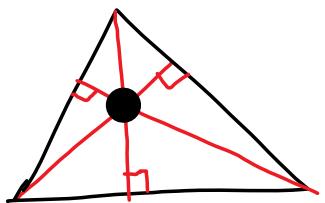
10)



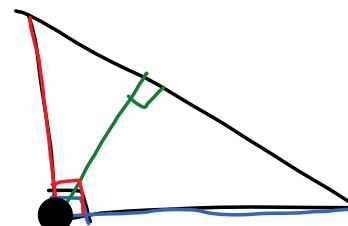
17. Find the coordinates of Q , the midpoint of \overline{MN} . $(5, 0)$
18. Find the length of the median \overline{PQ} . 6
19. Find the coordinates of the centroid. Label this point as T . $(5, 2)$

11-12)

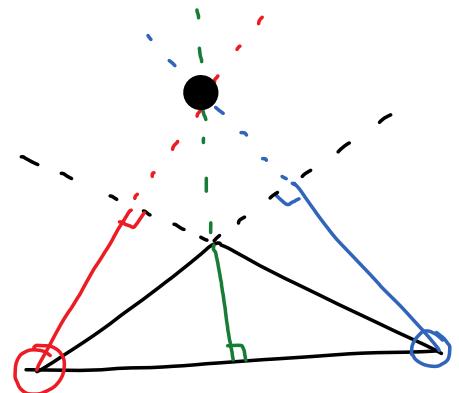
24. an acute $\triangle ABC$



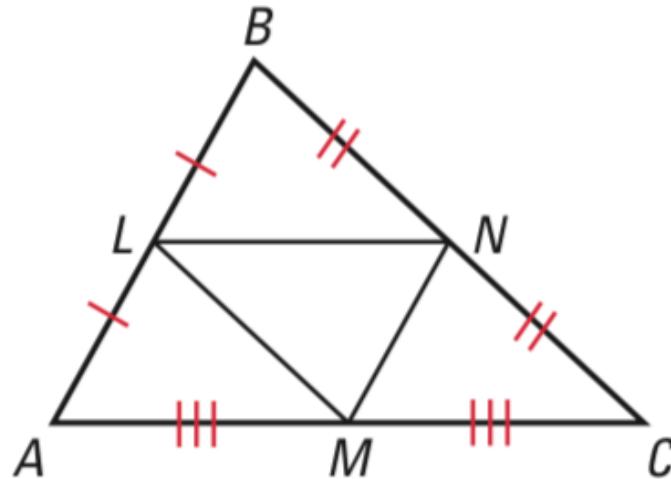
25. a right $\triangle EFG$ with right angle at G



26. an obtuse $\triangle KLM$



13)



12. $\overline{LM} \parallel \underline{\ ? } \ \textcircled{BC}$

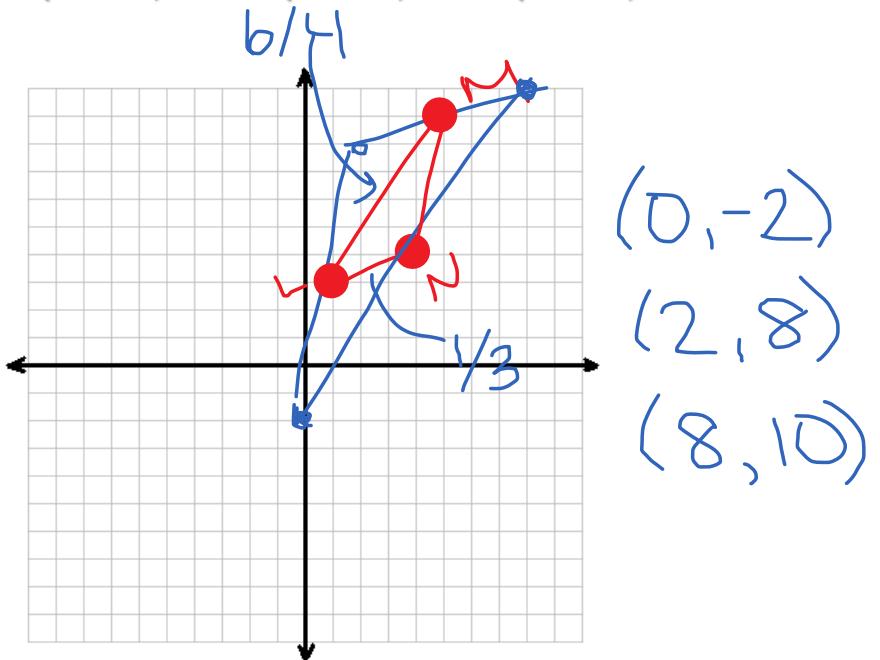
13. $\overline{AB} \parallel \underline{\ ? } \ \textcircled{MN}$

14. If $AC = 20$, then $LN = \underline{\ ? } \ \textcircled{10}$

15. If $MN = 7$, then $AB = \underline{\ ? } \ \textcircled{14}$

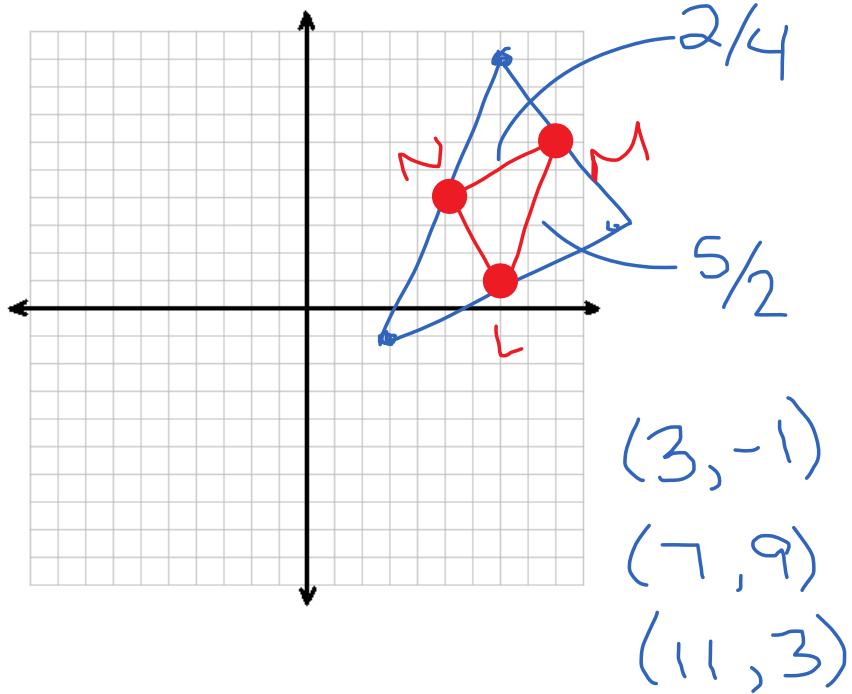
14)

26. $L(1, 3)$, $M(5, 9)$, $N(4, 4)$



$(0, -2)$
 $(2, 8)$
 $(8, 10)$

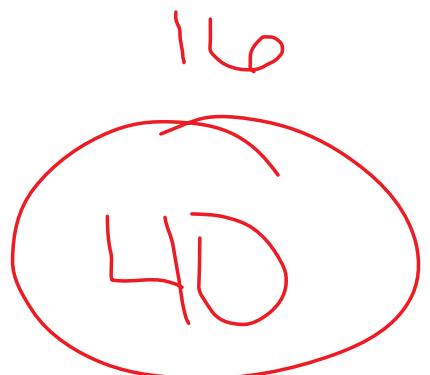
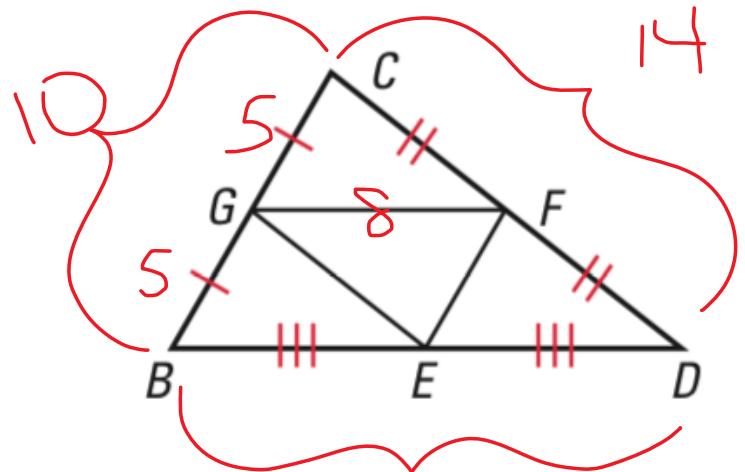
27. $L(7, 1)$, $M(9, 6)$, $N(5, 4)$



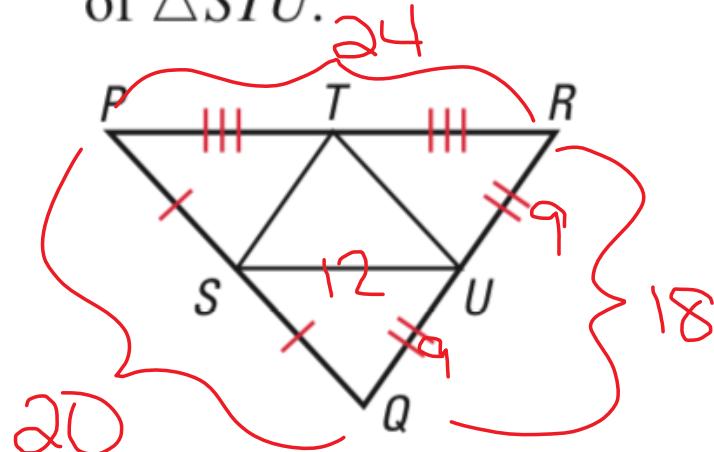
$(3, -1)$
 $(7, 9)$
 $(11, 3)$

15)

28. Given $CD = 14$, $GF = 8$,
and $GC = 5$, find the perimeter
of $\triangle BCD$.



29. Given $PQ = 20$, $SU = 12$,
and $QU = 9$, find the perimeter
of $\triangle STU$.

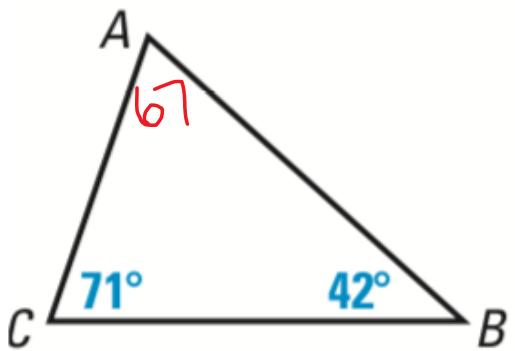


62 \rightarrow PQR

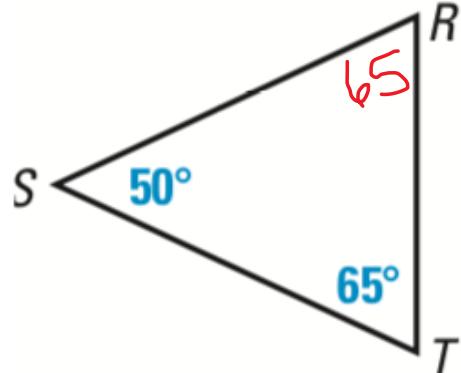
31 \rightarrow STU

16)

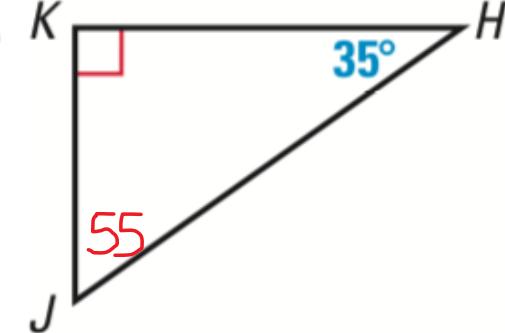
6.



7.



8.



shortest – AC

longest – AB

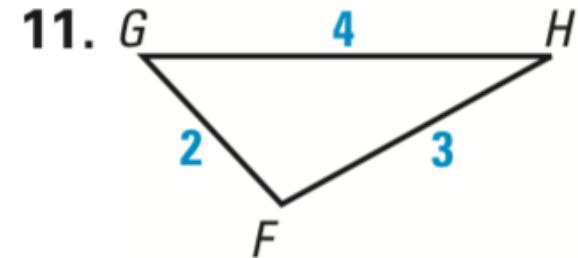
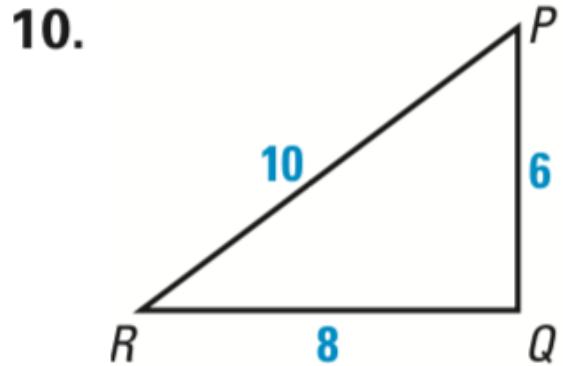
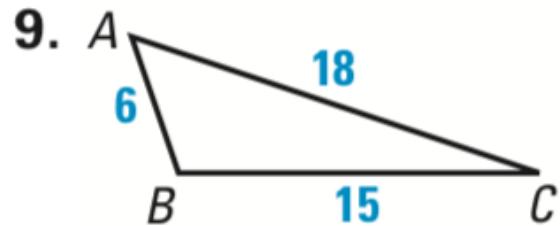
shortest – RT

longest – ST or SR

shortest – JK

longest – JH

17)



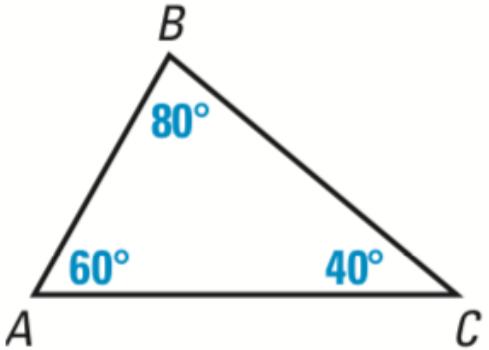
smallest -- $\angle C$
biggest -- $\angle B$

smallest -- $\angle R$
biggest -- $\angle Q$

smallest -- $\angle H$
biggest -- $\angle F$

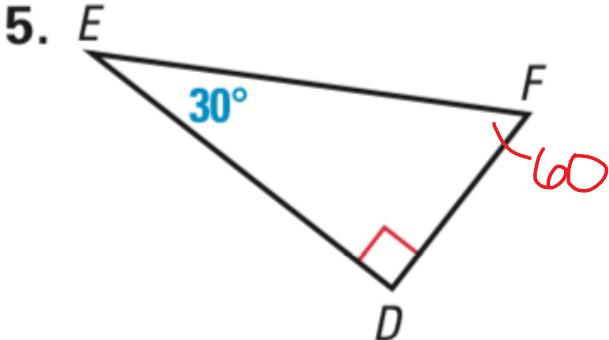
18)

14.



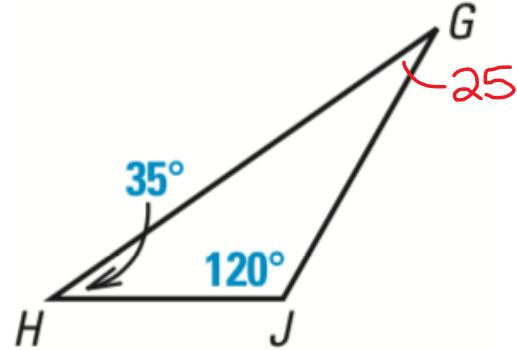
AB, BC, AC

15.



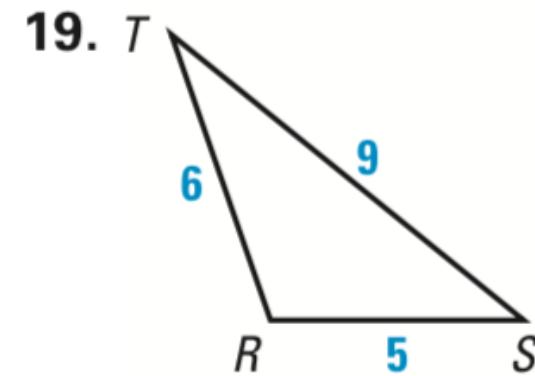
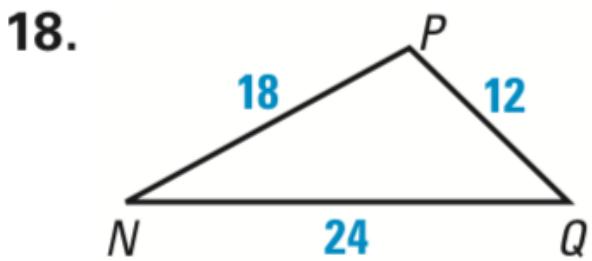
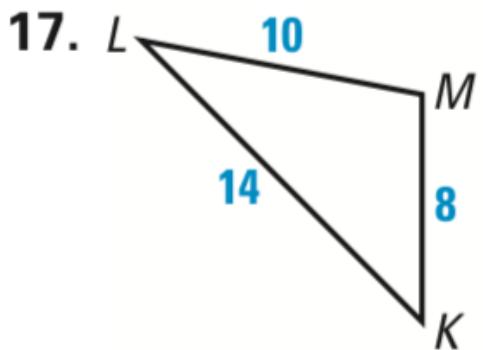
DF, DE, EF

16.



HJ, GJ, GH

19)



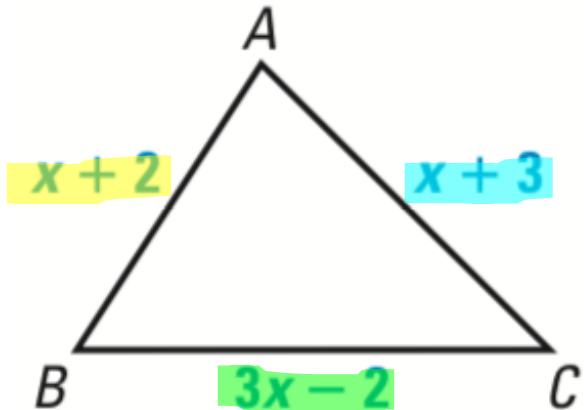
$\angle L, \angle K, \angle M$

$\angle N, \angle Q, \angle P$

$\angle T, \angle S, \angle R$

20) $AB + AC > BC$

24.

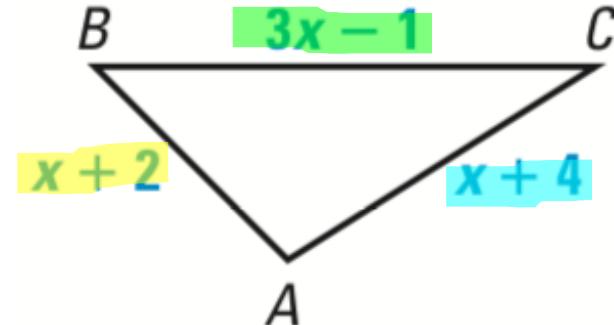


$$x + 2 + x + 3 > 3x - 2$$

$$\cancel{2x} + 5 > \cancel{-2x} 3x - 2$$

$$+5 > x - 2$$
$$7 > x \quad (x < 7)$$

25.



$$x + 2 + x + 4 > 3x - 1$$

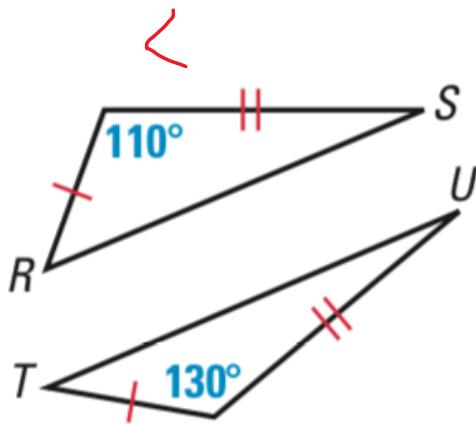
$$\cancel{2x} + 6 > \cancel{-2x} 3x - 1$$

$$+6 > x - 1$$

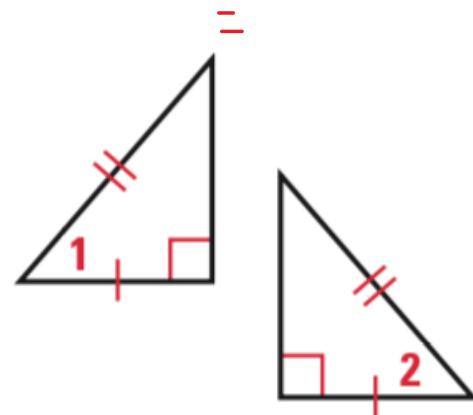
$$7 > x \quad (x < 7)$$

21)

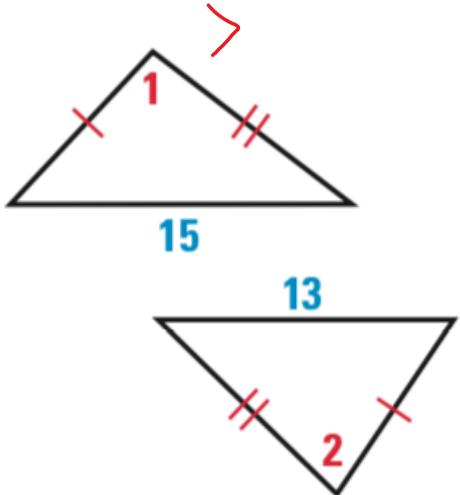
7. $RS \underline{\quad} TU$



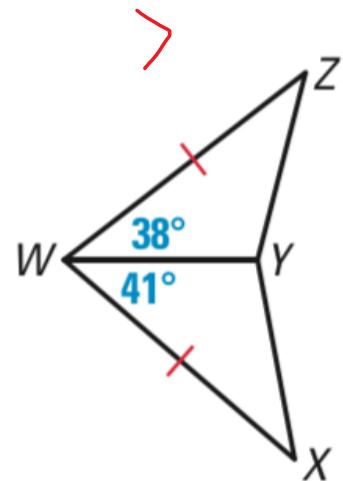
8. $m\angle 1 \underline{\quad} m\angle 2$



9. $m\angle 1 \underline{\quad} m\angle 2$

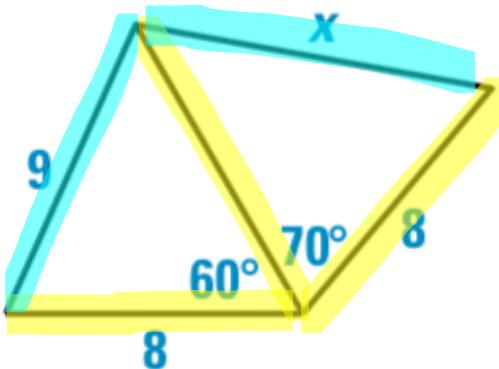


10. $XY \underline{\quad} ZY$



22)

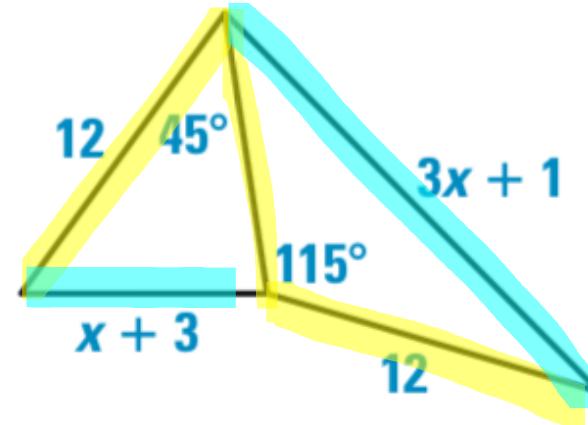
18.



$$70^\circ > 60^\circ$$

$$x > 9$$

19.



$$115^\circ > 45^\circ$$

$$3x + 1 > x + 3$$

$$-x \quad -x$$

$$2x + 1 > 3$$

$$-1 \quad -1$$

~~$$\frac{2x}{2} > \frac{2}{2}$$~~

$$x > 1$$

23)

- 21.** If $RS + ST \neq 12$ in. and $ST = 5$ in., then $RS \neq 7$ in.
- 22.** In $\triangle MNP$, if Q is the midpoint of \overline{NP} , then \overline{MQ} is a median.
- 23.** In $\triangle ABC$, if $m\angle A + m\angle B = 90^\circ$, then $m\angle C = 90^\circ$.

21 – Assume $RS = 7$ in.

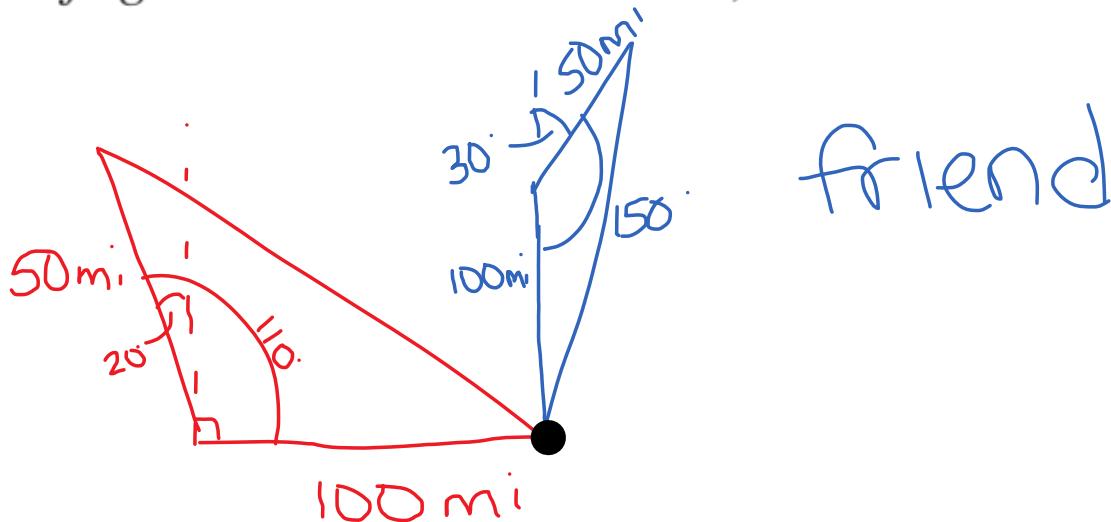
22 – Assume MQ is not a median.

23 – Assume $m\angle C$ is not $= 90^\circ$ (either $m\angle C > 90^\circ$ or $m\angle C < 90^\circ$).

24)

28. Your flight: 100 miles due west, then 50 miles N 20° W

Friend's flight: 100 miles due north, then 50 miles N 30° E



29. Your flight: 210 miles due south, then 80 miles S 70° W

Friend's flight: 80 miles due north, then 210 miles N 50° E

