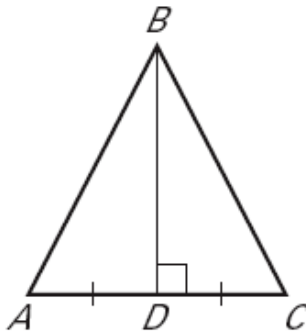
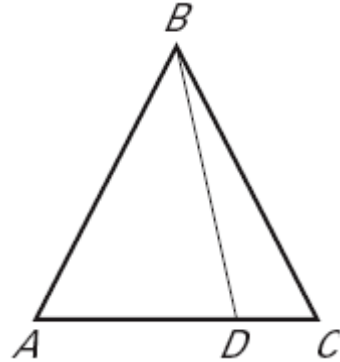


Is \overline{BD} a *median* of $\triangle ABC$? Is \overline{BD} an *altitude*? a *perpendicular bisector*? or *Neither*.

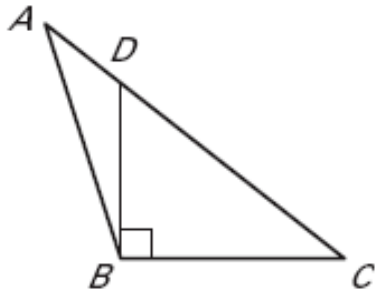
1)



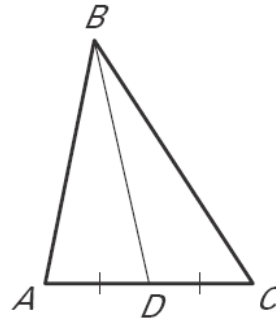
2)



3)

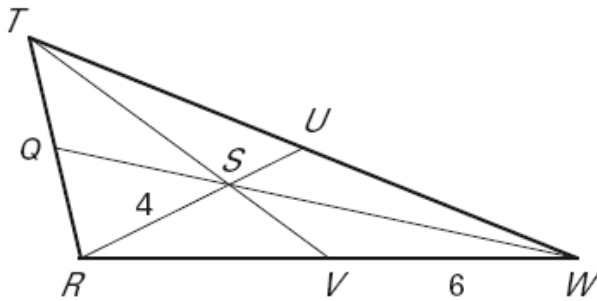


4)



S is the point of concurrency of the medians of $\triangle RTW$, $RS = 4$, $VW = 6$, and $TV = 9$. Find the length of each segment.

- 5) \overline{RV}
- 6) \overline{SU}
- 7) \overline{RU}
- 8) \overline{RW}
- 9) \overline{TS}
- 10) \overline{SV}

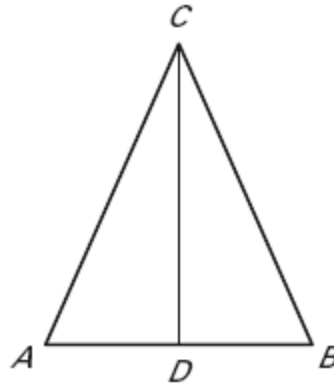


CD is the perpendicular bisector of AB. AC = 13, AB = 10.

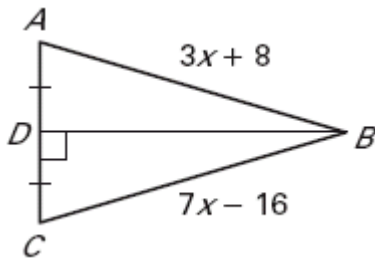
11) $m\angle CDA =$ _____

12) $CD =$ _____

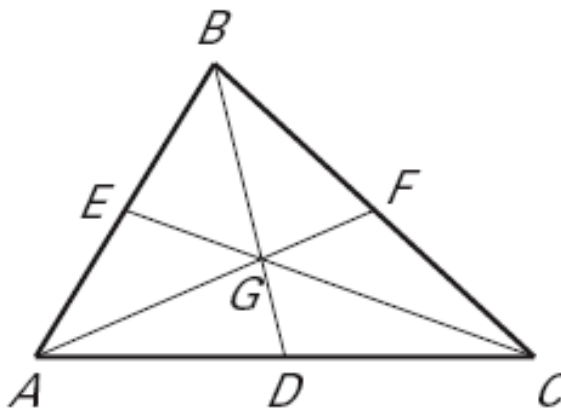
13) $CB =$ _____



14) Find the length of BC.

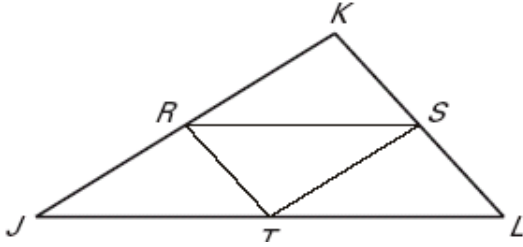


G is the point of concurrency of the medians of Triangle ABC.



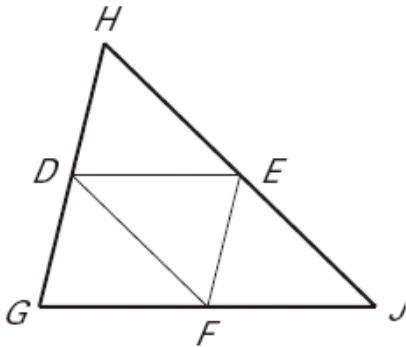
15) If $AD = 6x + 19$ and $DC = 4x + 27$, then $x =$ _____ and $AC =$ _____.

In $\triangle JKL$, $\overline{JR} \cong \overline{RK}$, $\overline{KS} \cong \overline{SL}$, and $\overline{JT} \cong \overline{TL}$. Copy and complete the statement.



16. $\overline{RS} \parallel$ _____
17. $\overline{ST} \parallel$ _____
18. $\overline{KL} \parallel$ _____
19. $\overline{SL} \cong$ _____ \cong _____
20. $\overline{JR} \cong$ _____ \cong _____
21. $\overline{JT} \cong$ _____ \cong _____

Use $\triangle GHJ$, where D , E , and F are midpoints of the sides.



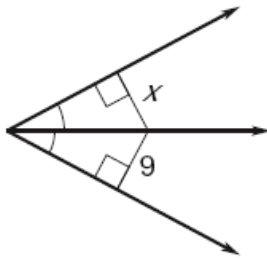
22. If $DF = 18$, then $HJ =$ _____.
23. If $DE = 4x + 5$ and $GJ = 3x + 25$, what is DE ?

24. If $HD = 2x + 7$ and $GD = 5x - 1$, what is EF ?

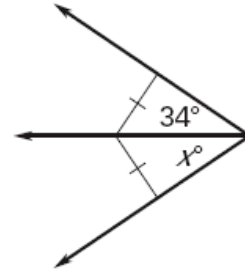
25. If $m\angle DHE = 70^\circ$ and $m\angle HDE = 60^\circ$, then $m\angle J =$ _____ and $m\angle G =$ _____.

Decide whether the value of x can be determined. If yes, find the value of x . If no, explain why it cannot be determined.

26.



27.



28.

