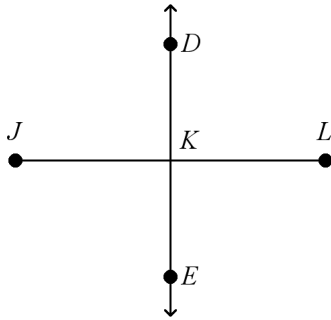


Honors Math II Quiz 4.1-4.2

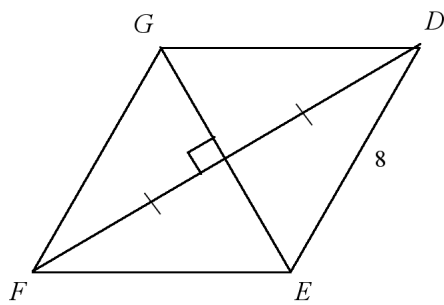
1. Which statement is not necessarily true?

Given: \overleftrightarrow{DE} is the \perp bisector of \overline{JL} .



- A. K is the midpoint of \overline{JL} .
- B. $DJ = DL$
- C. $\overline{DE} \perp \overline{JL}$
- D. $DK = KE$

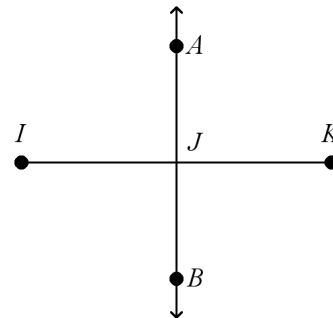
2. The length of \overline{DE} is shown. What other length can you determine for this diagram?



- A. $DF = 16$
- B. $EF = 8$
- C. $DG = 8$
- D. No other length can be determined.

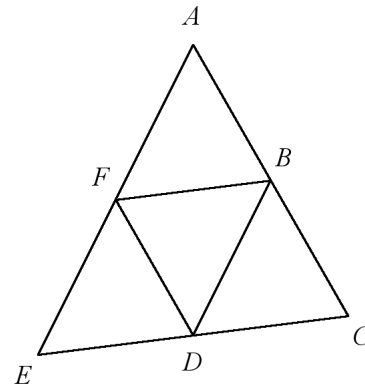
3. Which statement can you conclude is true from the given information?

Given: \overleftrightarrow{AB} is the perpendicular bisector of \overline{IK} .

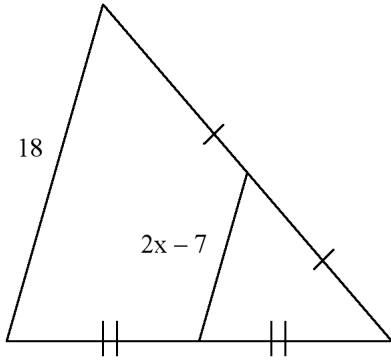


- A. $\angle IAK$ is a right angle.
- B. $BI = BK$
- C. B is the midpoint of \overline{IK} .
- D. $BK = AK$

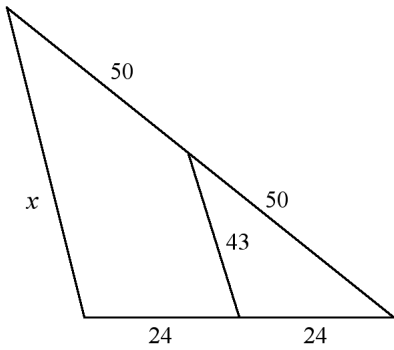
4. Points B , D , and F are midpoints of the sides of $\triangle ACE$. $EC = 37$ and $DF = 15$. Find AC .
The diagram is not to scale.



5. Find the value of x .

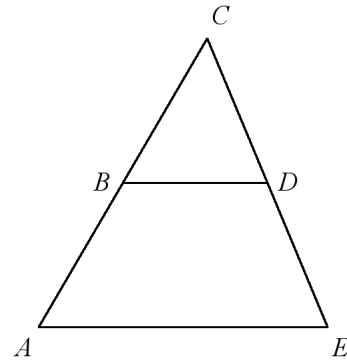


6. Find the value of x . The diagram is not to scale.

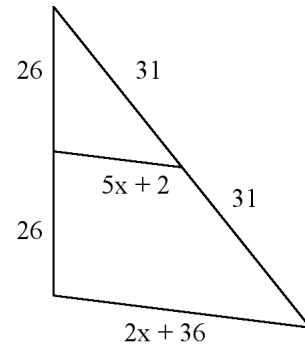


7. Name three properties of midsegments.

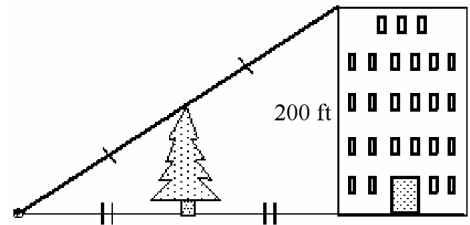
8. B is the midpoint of \overline{AC} , D is the midpoint of \overline{CE} , and $AE = 17$. Find BD . The diagram is not to scale.



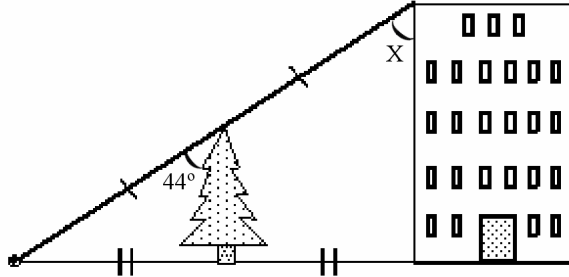
9. Find the length of the midsegment. The diagram is not to scale.



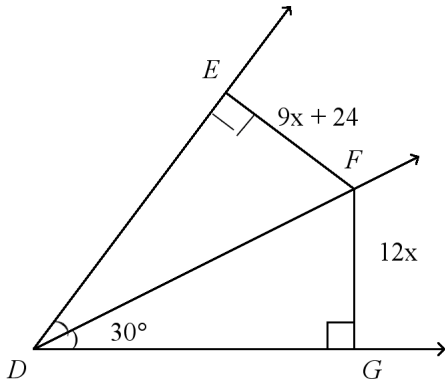
10. Use the information in the diagram to determine the height of the tree. The diagram is not to scale. Explain how you know.



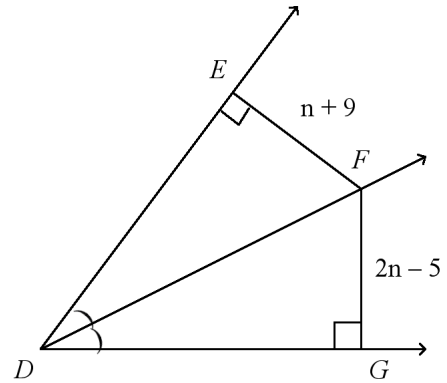
11. Use the information in the diagram to determine the measure of the angle x formed by the line from the point on the ground to the top of the building and the side of the building. The diagram is not to scale. Explain how you know.



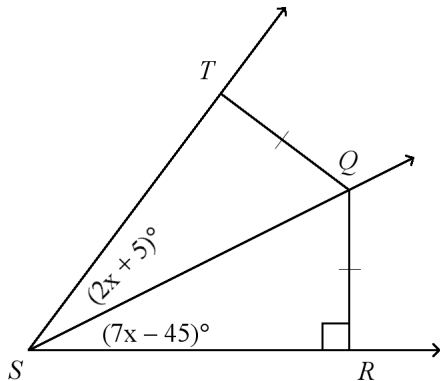
12. \overrightarrow{DF} bisects $\angle EDG$. Find the value of x . The diagram is not to scale.



14. \overrightarrow{DF} bisects $\angle EDG$. Find FG . The diagram is not to scale.



13. Q is equidistant from the sides of $\angle TSR$. Find $m\angle RST$. The diagram is not to scale.



15. Identify parallel segments in the diagram.

