Name _____ Date _____

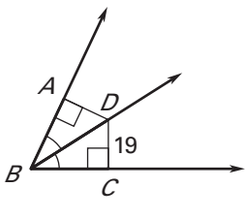
LESSON 5.3

Practice B

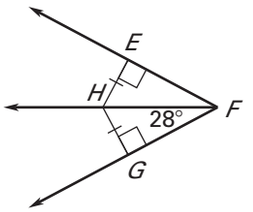
For use with pages 310–316

Use the information in the diagram to find the measure.

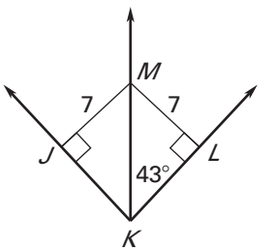
1. Find AD.



2. Find $m\angle EFH$.

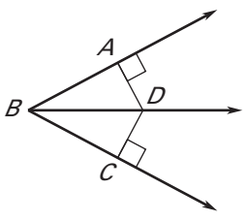


3. Find $m\angle JKL$.

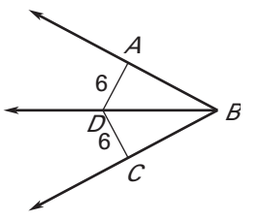


Can you conclude that $\overrightarrow{BD}$ bisects $\angle ABC$? *Explain*.

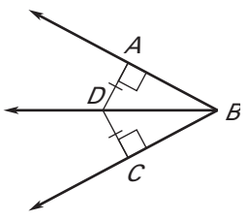
4.



5.

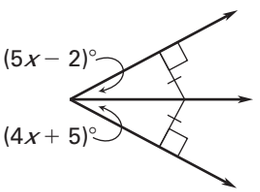


6.

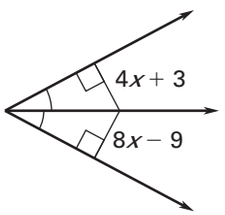


Find the value of *x*.

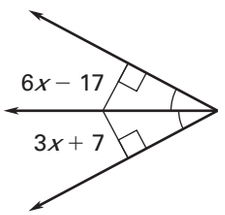
7.



8.

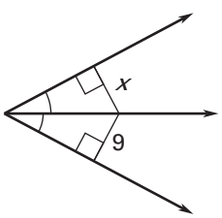


9.

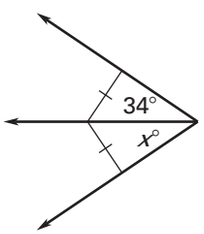


Can you find the value of *x*? *Explain*.

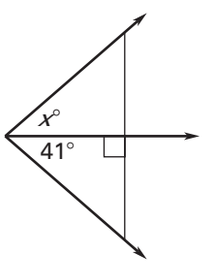
10.



11.



12.



Name _____ Date _____

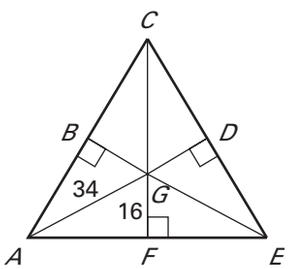
LESSON 5.3

Practice B *continued*

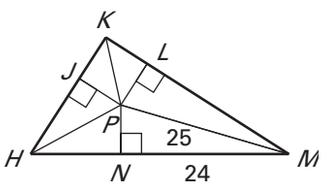
For use with pages 310–316

Find the indicated measure.

13. Point G is the incenter of $\triangle ACE$. Find BG.

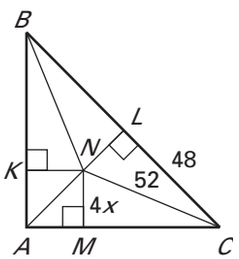


14. Point P is the incenter of $\triangle HKM$. Find JP.

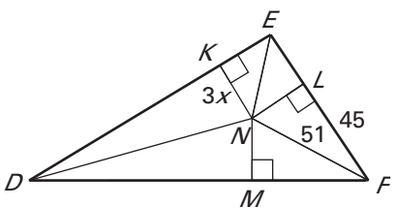


Find the value of x that makes N the incenter of the triangle.

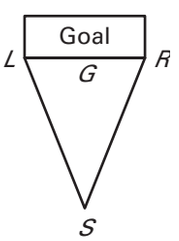
15.



16.



17. Hockey You and a friend are playing hockey in your driveway. You are the goalie, and your friend is going to shoot the puck from point S. The goal extends from left goalpost L to right goalpost R. Where should you position yourself (point G) to have the best chance to prevent your friend from scoring a goal? *Explain.*



18. Monument You are building a monument in a triangular park. You want the monument to be the same distance from each edge of the park. Use the figure with incenter G to determine how far from point D you should build the monument.