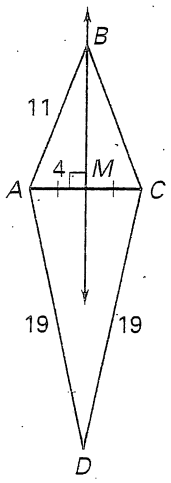
CHAPTER 5

NAME _____ DATE _____

Chapter Test B

For use after Chapter 5

In Exercises 1–3, use the diagram.

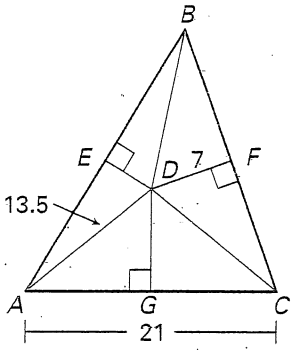


1. $\overleftrightarrow{BM} \perp \overleftrightarrow{AC}$ and $\overline{AM} \cong \overline{CM}$. Find AC.
2. $\overleftrightarrow{BM} \perp \overleftrightarrow{AC}$ and $\overline{AM} \cong \overline{CM}$. Find CB.
3. $\overleftrightarrow{BM}$ is the perpendicular bisector of $\overline{AC}$. Because $AD = CD = 19$, what can you conclude about point D?

In Exercises 4–6, complete the statement with the word *inside*, *on*, or *outside*.

4. The point of concurrency for perpendicular bisectors of a right triangle is __?__ the triangle.
5. The centroid of a triangle is located __?__ the triangle.
6. In an obtuse triangle, the orthocenter is __?__ the triangle.

In Exercises 7 and 8, use the diagram to indicate measure.



7. The perpendicular bisectors of $\triangle ABC$ meet at point D. Find BD.
8. Find DC.

Draw the given figure.

9. A right triangle with 3 angle bisectors

10. An acute triangle with 3 perpendicular bisectors

In Exercises 11–15, complete the statement with the word *always*, *sometimes*, or *never*.

11. The perpendicular bisector __?__ has a vertex as an endpoint.
12. The perimeter of the triangle formed by the midsegments is __?__ half of the original triangle's perimeter.
13. The medians will __?__ intersect inside an acute triangle.
14. The perpendicular bisectors of an acute triangle will __?__ intersect on the triangle.
15. Obtuse triangle medians will __?__ intersect on the triangle.

Answers

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. See left.
10. See left.
11. _____
12. _____
13. _____
14. _____
15. _____

Review and Assess