

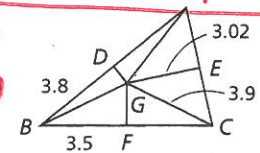
7. Write an equation in point-slope form for the perpendicular bisector of the segment with endpoints $A(1, 4)$ and $B(-5, -2)$. $y - 1 = -1(x + 2)$ or $y = -x - 1$

Lesson
5-2

\overline{DG} , \overline{EG} , and \overline{FG} are the perpendicular bisectors of $\triangle ABC$. Find each length.

8. BG 5.4

9. AG 5.4



Find the circumcenter of a triangle with the given vertices.

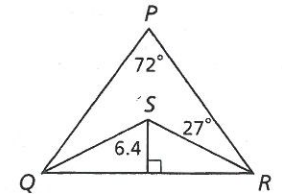
10. $H(5, 0)$, $J(0, 3)$, $K(0, 0)$ $(2\frac{1}{2}, 1\frac{1}{2})$

11. $L(0, 0)$, $M(-2, 0)$, $N(0, -4)$ $(-1, -2)$

\overline{QS} and \overline{RS} are angle bisectors of $\triangle QPR$. Find each measure.

12. the distance from S to \overline{PR}
6.4

13. $m\angle SQP$
27°



Lesson
5-3

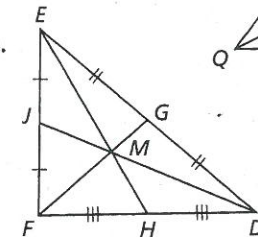
In $\triangle DEF$, $DJ = 30$, and $FM = 12$. Find each length.

14. DM 20

15. MJ 10

16. GF 18

17. GM 6



Find the orthocenter of a triangle with the given vertices.

18. $N(-2, 2)$, $P(4, 2)$, $Q(0, -2)$ $(0, 0)$

19. $R(-2, 1)$, $S(2, 5)$, $T(4, 1)$ $(2, 3)$

Lesson
5-4

20. The vertices of $\triangle WXY$ are $W(-3, 2)$, $X(5, 2)$, and $Y(1, -4)$. A is the midpoint of \overline{WY} , and B is the midpoint of \overline{XY} . Show that $\overline{AB} \parallel \overline{WX}$ and $AB = \frac{1}{2}WX$. See p. A34.

Find each measure.

21. DE 13

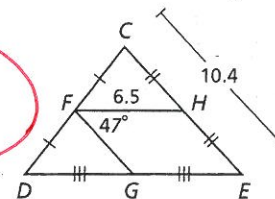
22. FG 5.2

23. DG 6.5

24. $m\angle CHF$ 47°

25. $m\angle FHE$ 133°

26. $m\angle CED$ 47°



AB 's slope = 0
 WX 's slope = 0
Parallel ✓
 $AB = 4$
 $WX = 8$
distance $\frac{1}{2}$ ✓