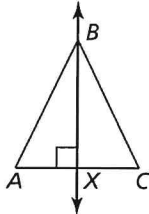


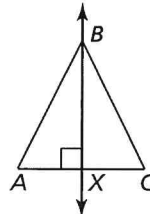
Chapter 6 Test B

Find the length of AC.

1. $AB = 18.5$, $AX = 8.1$,
and $BC = 18.5$

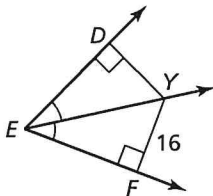


2. $AB = 9$, $AX = 4$,
and $BC = 9$

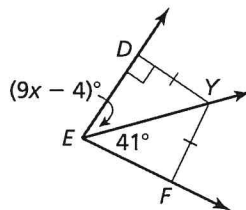


Find the indicated measure.

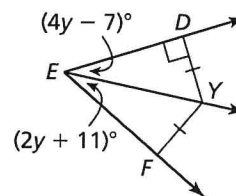
3. DY



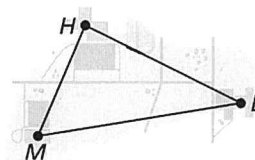
4. $m\angle DEY$



5. $m\angle DEF$



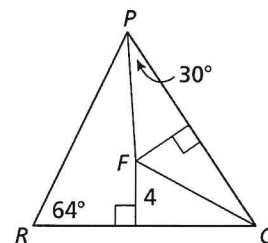
6. A school district is planning to build a playground on the school's campus. They want the playground to be the same distance from the elementary school E , the middle school M , and the high school H . Draw a sketch on the diagram to show where the playground should be placed.



\overline{PF} and \overline{QF} are angle bisectors of $\triangle PQR$. Find each measure.

7. distance from F to \overline{PQ}

8. $m\angle FQP$



Find the following coordinates of $\triangle ABC$ with vertices $A(-4, 6)$, $B(2, 6)$, and $C(-4, -2)$.

9. circumcenter

10. orthocenter

11. centroid

Answers

1. _____
2. _____
3. _____
4. _____
5. _____
6. **See left.**
7. _____
8. _____
9. _____
10. _____
11. _____

Chapter 6

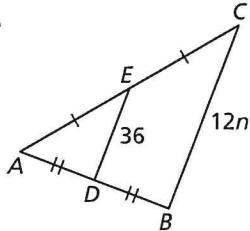
Test B (continued)

Find the coordinates of the vertices of the midsegment of a triangle for a triangle with the given vertices.

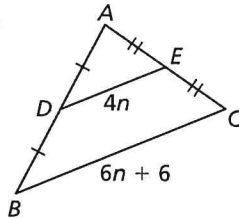
12. $A(-2, -4), B(4, 8), C(6, -2)$ 13. $A(4, 5), B(-2, -7), C(-8, 3)$

\overline{DE} is a midsegment of $\triangle ABC$. Find the value of n .

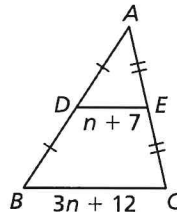
14.



15.



16.



Describe the possible lengths of the third side of the triangle given the lengths of the other two sides.

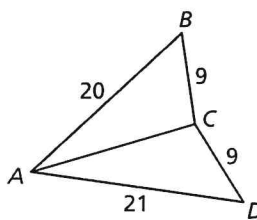
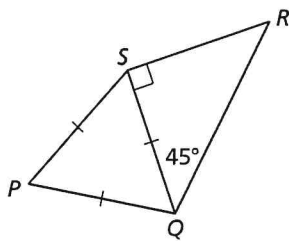
17. 5yd, 24 yd 18. 8.7 in., 3.2 in. 19. 4.16 m, 2 m

List the angles of $\triangle DEF$ in order from least to greatest.

20. $D(-2, -3), E(6, 3), F(-2, 8)$ 21. $D(2, 5), E(2, -5), F(4, 6)$

Copy and complete the statement with $<$, $>$, or $=$.

22. PS ___ RS 23. $m\angle BCA$ ___ $m\angle DCA$



24. Write an indirect proof that a triangle cannot contain more than one obtuse angle.

- Answers**
12. _____
13. _____
14. _____
15. _____
16. _____
17. _____
18. _____
19. _____
20. _____
21. _____
22. _____
23. _____
24. See left.