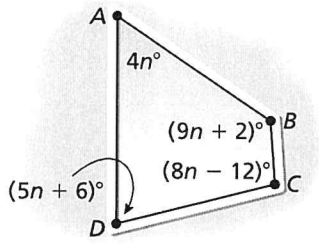
Name _____ Date _____

Chapter 7 Test B

A window is the shape of a quadrilateral. Find the indicated measure.

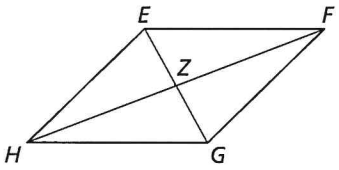
1. $m\angle A$
2. $m\angle B$
3. $m\angle C$
4. $m\angle D$



5. Find the measure of each interior angle of a regular dodecagon.
6. Find the measure of each exterior angle of a regular 16-gon.

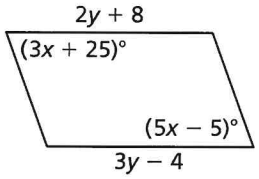
In parallelogram *EFGH*, *EH* = 16, *HZ* = 4, and $m\angle EHG = 44°$. Find the indicated measure.

7. FH
8. $m\angle FEH$

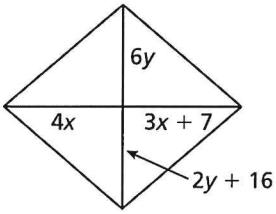


Find the values of *x* and *y* that make the quadrilateral a parallelogram.

9.

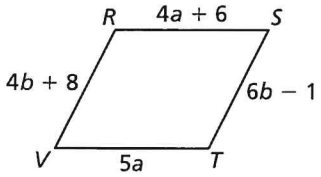


10.

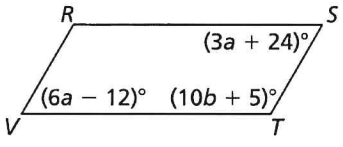


State which theorem you can use to show that the quadrilateral is a parallelogram. Explain your reasoning.

11. $a = 6$ and $b = 4.5$

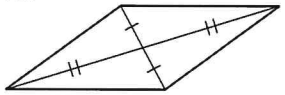


12. $a = 12$ and $b = 11.5$

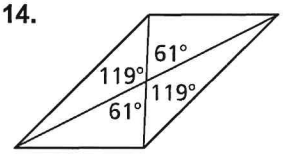


From the information given, can you determine whether the quadrilateral is a parallelogram? Explain your reasoning.

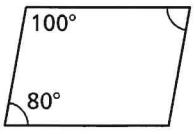
13.



14.



15.



Answers

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

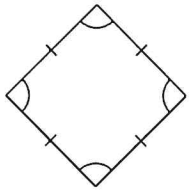
Copyright © Big Ideas Learning, LLC
All rights reserved.

Name _____ Date _____

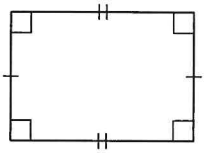
Chapter 7 Test B (continued)

Given the most specific name for the quadrilateral. Explain your reasoning.

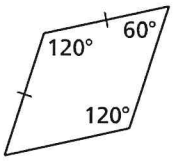
16.



17.



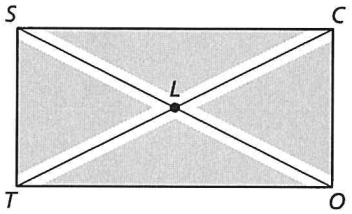
18.



The flag of Scotland is a rectangle with white stripes as the diagonals. In rectangle *SCOT*, *SO* = 92.4, and *CO* = 41. Find the indicated measure.

19. OL **20.** ST

21. CT **22.** LT



Determine whether the parallelogram with the given vertices is a *rectangle*, *rhombus*, or *square*. Give all names that apply. Explain your reasoning.

23. $A(-6, -2)$, $B(-3, 3)$, $C(2, 0)$, $D(-1, -5)$

24. $L(-3, 4)$, $M(3, 3)$, $N(4, -3)$, $O(-2, -2)$

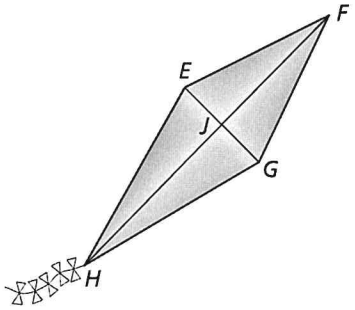
In kite *EFGH*, $m\angle FHG = 15°$, and $m\angle FEH = 146°$. Find the indicated measure.

25. $m\angle FEJ$

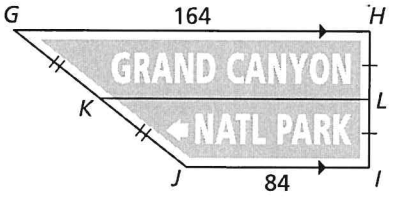
26. $m\angle EHJ$

27. $m\angle FGJ$

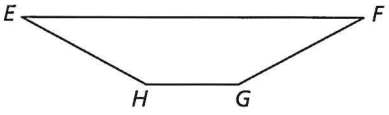
28. $m\angle EHG$



29. Find the length of the midsegment of the trapezoid.



30. Find the value of *x* such that $m\angle H = 8x°$ and $m\angle G = (10x - 38)°$ in the isosceles trapezoid.



Answers

16. _____

17. _____

18. _____

19. _____

20. _____

21. _____

22. _____

23. _____

24. _____

25. _____

26. _____

27. _____

28. _____

29. _____

30. _____

Copyright © Big Ideas Learning, LLC
All rights reserved.