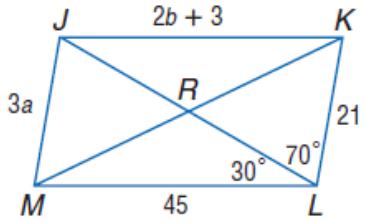
Geometry

Name _____

6.2 and 6.3 Parallelograms

Date _____ Hour _____

Use $\square JKLM$ to find each measure or value.



6. $m\angle MJK$ **7.** $m\angle JML$

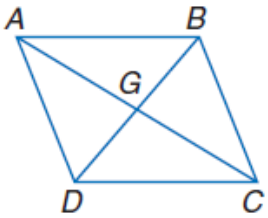
8. $m\angle JKL$ **9.** $m\angle KJL$

10. a **11.** b

12. STANDARDIZED TEST PRACTICE Parallelogram $GHJK$ has vertices $G(-3, 4)$, $H(1, 1)$, and $J(3, -5)$. Which are possible coordinates for vertex K?

A $(-1, 1)$ **B** $(-2, 0)$ **C** $(-1, -2)$ **D** $(-2, -1)$

Complete each statement about $\square ABCD$. Justify your answer.



15. $\angle DAB \cong$ ___?___.

16. $\angle ABD \cong$ ___?___.

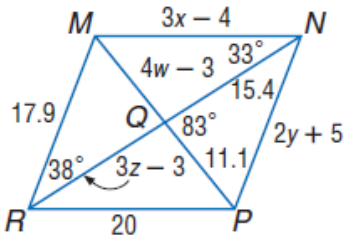
17. $\overline{AB} \parallel$ ___?___.

18. $\overline{BG} \cong$ ___?___.

19. $\triangle ABD \cong$ ___?___.

20. $\angle ACD \cong$ ___?___.

ALGEBRA Use $\square MNPR$ to find each measure or value. Round to the nearest tenth if necessary.



21. $m\angle MNP$ **22.** $m\angle NRP$

23. $m\angle RNP$ **24.** $m\angle RMN$

25. $m\angle MQN$ **26.** $m\angle MQR$

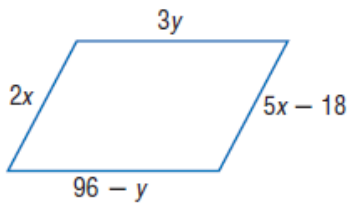
27. x **28.** y

29. w **30.** z

53. JOBS Jamie works at a gift shop after school. She is paid \$10 per hour plus a 15% commission on merchandise that she sells. Write an equation that represents her earnings in a week if she sold \$550 worth of merchandise.

ALGEBRA Find x and y so that each quadrilateral is a parallelogram.

20.



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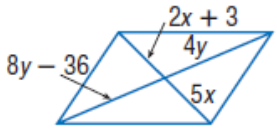

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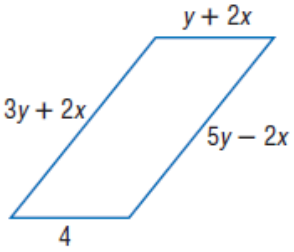

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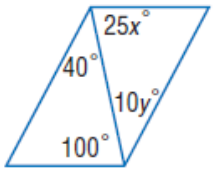

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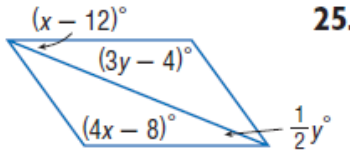

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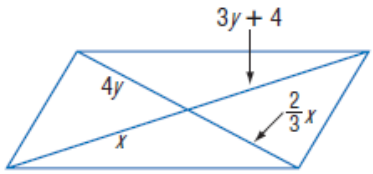


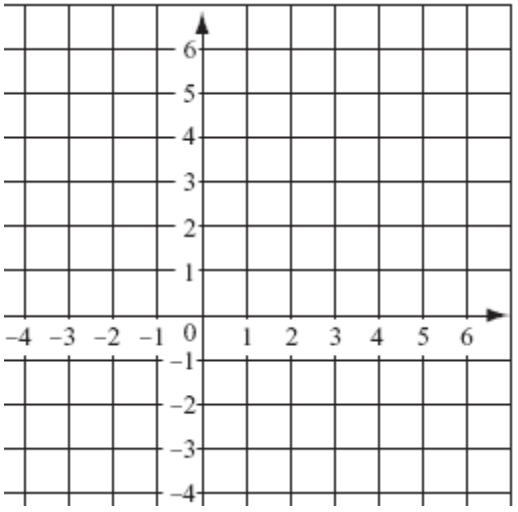
COORDINATE GEOMETRY Determine whether a figure with the given vertices is a parallelogram. Use the method indicated.

26. $B(-6, -3)$, $C(2, -3)$, $E(4, 4)$, $G(-4, 4)$; Midpoint Formula

27. $H(5, 6)$, $J(9, 0)$, $K(8, -5)$, $L(3, -2)$; Distance Formula

COORDINATE GEOMETRY The coordinates of three of the vertices of a parallelogram are given. Find the possible coordinates for the fourth vertex.

32. $A(1, 4)$, $B(7, 5)$, and $C(4, -1)$



40. REVIEW Jarod's average driving speed for a 5-hour trip was 58 miles per hour. During the first 3 hours, he drove 50 miles per hour. What was his average speed in miles per hour for the last 2 hours of his trip?

F 70 H 60

G 66 J 54