LESSON 8.2 Practice B
For use with pages 514–521

Find the measure of the indicated angle in the parallelogram.

1. Find $m\angle B$.  
2. Find $m\angle G$.  
3. Find $m\angle M$.

Find the value of each variable in the parallelogram.

4. $a$, $b$, $9$, $11$  
5. $x + 2$, $y - 5$, $12$, $4$  
6. $16$, $(y - 60)\degree$, $3x + 4$, $56$  
7. $(f + 30)\degree$, $8g - 3$, $25$, $72\degree$  
8. $m + 8$, $2n - 1$, $9$, $3m$  
9. $3j$, $6k$, $k + 10$, $5j - 9$

10. In $\square WXYZ$, $m\angle W$ is 50 degrees more than $m\angle X$. Sketch $\square WXYZ$. Find the measure of each interior angle. Then label each angle with its measure.

11. In $\square EFGH$, $m\angle G$ is 25 degrees less than $m\angle H$. Sketch $\square EFGH$. Find the measure of each interior angle. Then label each angle with its measure.

Find the indicated measure in $\square ABCD$.

12. $m\angle AEB$  
13. $m\angle BAE$  
14. $m\angle AED$  
15. $m\angle ECB$  
16. $m\angle BAD$  
17. $m\angle DCE$  
18. $m\angle ADC$  
19. $m\angle DCB$
Use the diagram of \(\square MNOP\). Points \(Q\), \(R\), \(S\), and \(T\) are midpoints of \(\overline{MX}\), \(\overline{NX}\), \(\overline{OX}\), and \(\overline{PX}\). Find the indicated measure.

20. \(PN\)
21. \(MQ\)
22. \(XO\)
23. \(m\angle NMQ\)
24. \(m\angle NXO\)
25. \(m\angle MNP\)
26. \(m\angle NPO\)
27. \(m\angle NOP\)

28. **Movie Equipment** The scissor lift shown at the right is sometimes used by camera crews to film movie scenes. The lift can be raised or lowered so that the camera can get a variety of views of one scene. In the figure, points \(E\), \(F\), \(G\), and \(H\) are the vertices of a parallelogram.

   a. If \(m\angle E = 45^\circ\), find \(m\angle F\).
   b. What happens to \(\angle E\) and \(\angle F\) when the lift is raised? Explain.

29. In parallelogram \(RSTU\), the ratio of \(RS\) to \(ST\) is \(5:3\). Find \(RS\) if the perimeter of \(\square RSTU\) is 64.

30. Parallelogram \(MNOP\) and parallelogram \(PQRO\) share a common side, as shown. Using a two-column proof, prove that segment \(MN\) is congruent to segment \(QR\).

   **GIVEN:** \(MNOP\) and \(PQRO\) are parallelograms.
   **PROVE:** \(MN \cong QR\)