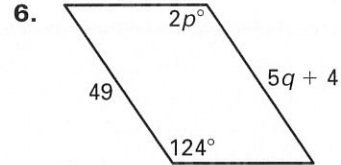
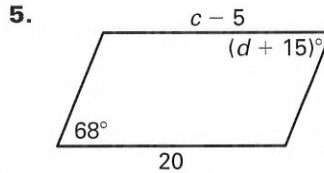
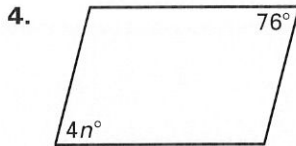
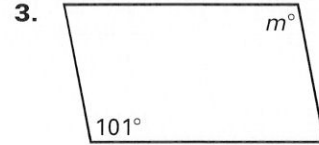
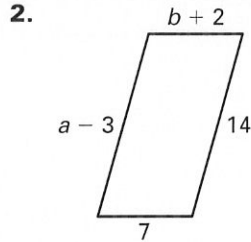
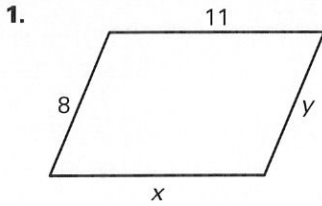


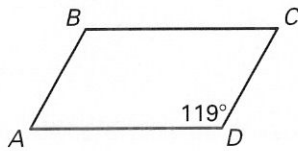
**LESSON 8.2 Practice A**  
For use with the lesson "Use Properties of Parallelograms"

Find the value of each variable in the parallelogram.

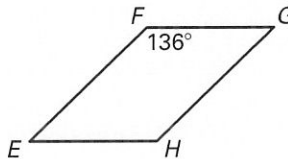


Find the measure of the indicated angle in the parallelogram.

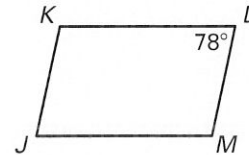
7. Find  $m\angle C$ .



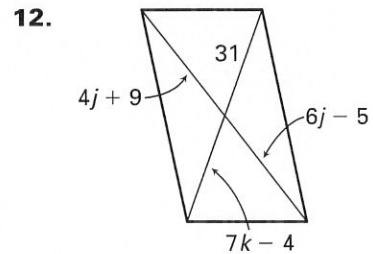
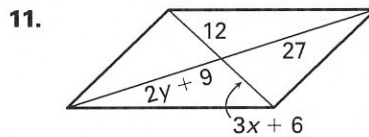
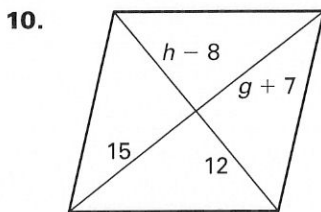
8. Find  $m\angle E$ .



9. Find  $m\angle K$ .



Find the value of each variable in the parallelogram.



Use the diagram of parallelogram  $MNOP$  at the right to copy and complete the statement. *Explain.*

13.  $\overline{MN} \cong$  ?

14.  $\overline{MN} \parallel$  ?

15.  $\overline{ON} \cong$  ?

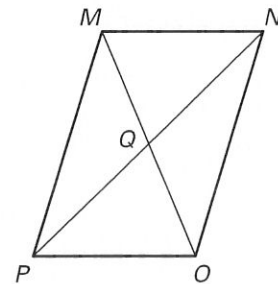
16.  $\angle MPO \cong$  ?

17.  $\overline{PQ} \cong$  ?

18.  $\overline{QM} \cong$  ?

19.  $\angle MQN \cong$  ?

20.  $\angle NPO \cong$  ?

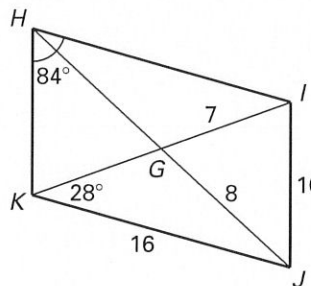


**LESSON**  
**8.2**

**Practice A** *continued*  
For use with the lesson "Use Properties of Parallelograms"

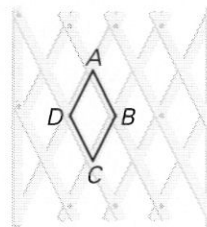
Find the indicated measure in  $\square HIJK$ . Explain.

- 21.  $HI$
- 22.  $KH$
- 23.  $GH$
- 24.  $HJ$
- 25.  $m\angle KIH$
- 26.  $m\angle JIH$
- 27.  $m\angle KJI$
- 28.  $m\angle HKI$



- 29. The measure of one interior angle of a parallelogram is twice the measure of another angle. Find the measure of each angle.
- 30. The measure of one interior angle of a parallelogram is 30 degrees more than the measure of another angle. Find the measure of each angle.

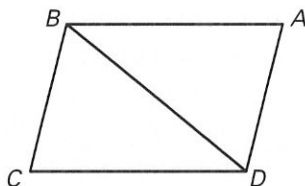
The crossing slats of a gate form parallelograms that move together to make the gate wider. In Exercises 31–34, use the figure at the right.



- 31. What is  $m\angle A$  when  $m\angle B = 110^\circ$ ?
- 32. What is  $m\angle D$  when  $m\angle B = 130^\circ$ ?
- 33. What happens to  $m\angle A$  when  $m\angle B$  decreases?
- 34. What happens to  $AC$  when  $m\angle B$  increases?
- 35. Complete the proof.

**GIVEN:**  $ABCD$  is a  $\square$ .

**PROVE:**  $\triangle ABD \cong \triangle CDB$



Statements	Reasons
1. $ABCD$ is a $\square$ .	1. <u>?</u>
2. <u>?</u>	2. Opposite sides of $\square$ are $\cong$ .
3. <u>?</u>	3. Opposite sides of $\square$ are $\cong$ .
4. $\angle A \cong \angle C$	4. <u>?</u>
5. $\triangle ABD \cong \triangle CBD$	5. <u>?</u>