LESSON 6.3

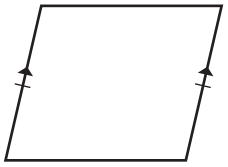
NAME _____ DATE _____

Practice A

For use with pages 338–346

Are you given enough information to determine whether the quadrilateral is a parallelogram? Explain.

1.



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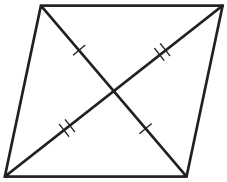

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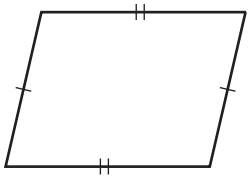

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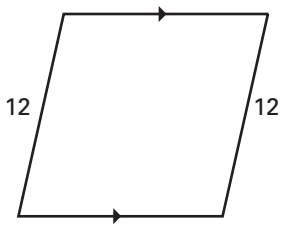
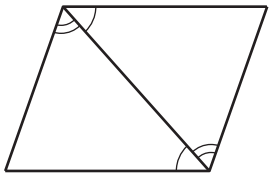
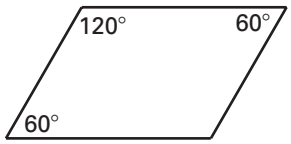


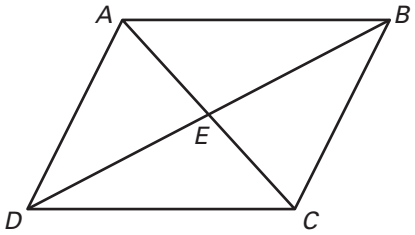
5.



6.



What additional information is needed in order to prove that quadrilateral *ABCD* is a parallelogram?



7. $\overline{AB} \parallel \overline{DC}$

8. $\overline{AB} \cong \overline{DC}$

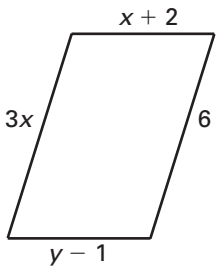
9. $\angle DCA \cong \angle BAC$

10. $\overline{DE} \cong \overline{EB}$

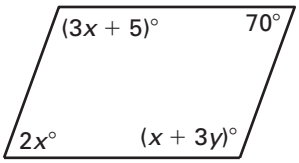
11. $m\angle CDA + m\angle DAB = 180°$

What value of *x* and *y* will make the polygon a parallelogram?

12.



13.



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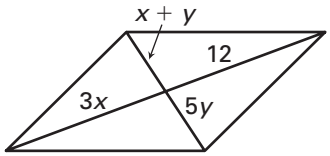
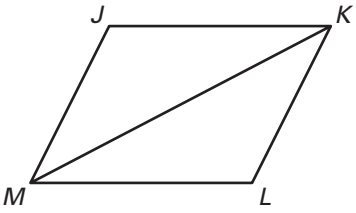


Write a two-column or a paragraph proof using each method.

15. Given: $\triangle MJK \cong \triangle KLM$

Prove: *MJKL* is a parallelogram.



a. By Theorem 6.6: If both pairs of opposite sides of a quadrilateral are congruent, then the quadrilateral is a parallelogram.

b. By Theorem 6.10: If one pair of opposite sides of a quadrilateral are congruent and parallel, then the quadrilateral is a parallelogram.

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