LESSON 6.6

NAME _____ DATE _____

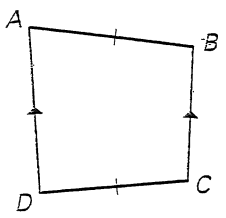
Practice B

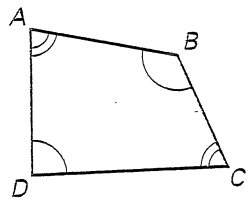
For use with pages 364–370

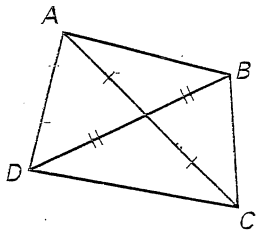
Copy the chart. Put an X in the box if the shape *always* has the given property.

Property	▱	*Rectangle*	*Rhombus*	*Square*	*Trapezoid*	*Kite*
1. Both pairs of opposite sides are congruent.						
2. Diagonals are congruent.						
3. Diagonals are perpendicular.						
4. Diagonals bisect one another.						
5. Consecutive angles are supplementary.						
6. Both pairs of opposite angles are congruent.						

What quadrilaterals meet the conditions shown? *ABCD* is not drawn to scale.

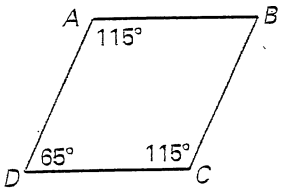
7. 

8. 

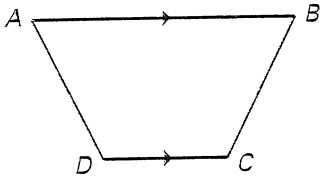
9. 

Which two segments or angles must be congruent to enable you to prove *ABCD* is the given quadrilateral? Explain your reasoning. There may be more than one right answer.

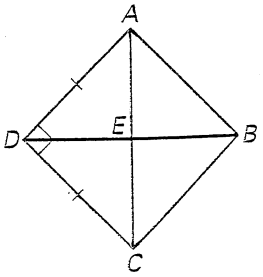
10. rhombus



11. isosceles trapezoid



12. square



In Exercises 13–15, what kind of quadrilateral is *PQRS*? Justify your answer.

13. $P(5, 4)$, $Q(3, -6)$, $R(0, -10)$, $S(2, 0)$

14. $P(4, 8)$, $Q(0, 9)$, $R(-2, 1)$, $S(2, 0)$

15. $P(1, 5)$, $Q(8, 6)$, $R(15, 5)$, $S(8, 4)$

16. Use the quadrilateral in Exercise 15. Find the midpoint of each side. Connect the midpoints to form a new quadrilateral. What kind of quadrilateral is formed?