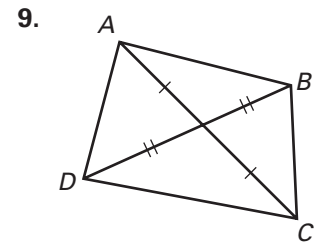NAME _____ DATE _____

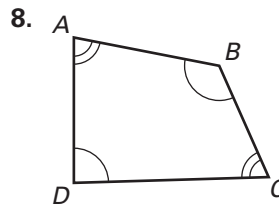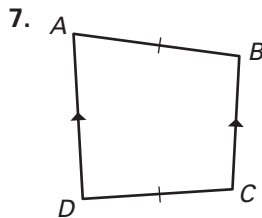## *Practice B*
For use with pages 364–370

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

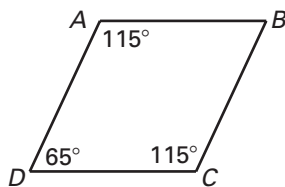| *Property*	□	*Rectangle*	*Rhombus*	*Square*	*Trapezoid*	*Kite*
1. Both pairs of opposite sides are congruent.						
2. Diagonals are congruent.						
3. Diagonals are perpendicular.						
4. Diagonals bisect one another.						
5. Consecutive angles are supplementary.						
6. Both pairs of opposite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

What quadrilaterals meet the conditions shown? *ABCD* is not drawn to scale.
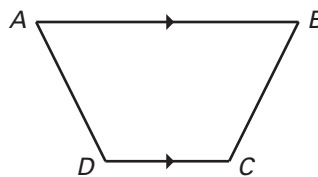
7.

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.
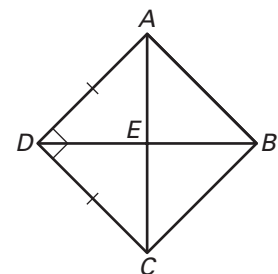
10. rhombus

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?