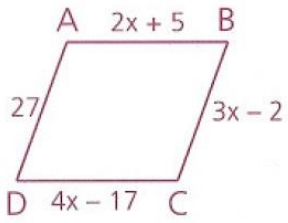
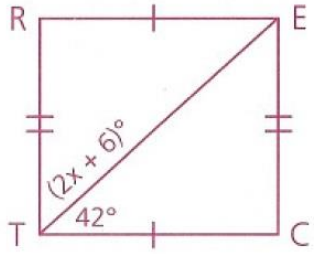
Unit 05 - Section 05

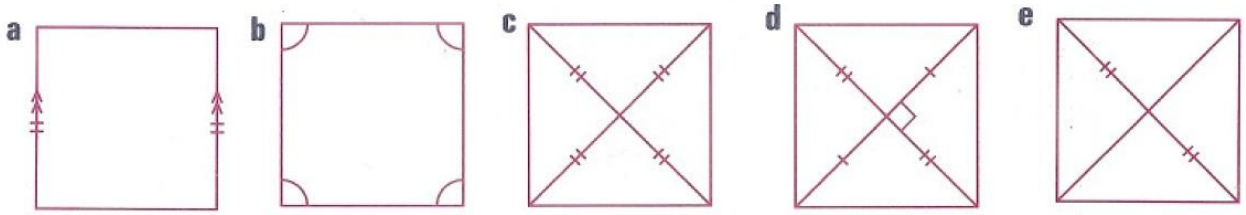
2 If $\overline{AB} \cong \overline{DC}$, show that ABCD is not a rhombus.



3 In order for RECT to be a rectangle, what must the value of x be?



13 What is the most descriptive name for each quadrilateral below?



In Exercises 29–34, name each quadrilateral—*parallelogram*, *rectangle*, *rhombus*, or *square*—for which the statement is always true.

29. It is equiangular.

30. It is equiangular and equilateral.

31. The diagonals are perpendicular.

32. Opposite sides are congruent.

33. The diagonals bisect each other.

34. The diagonals bisect opposite angles.

CRITICAL THINKING **In Exercises 65–70, complete each statement with *always*, *sometimes*, or *never*. Explain your reasoning.**

65. A square is _____ a rhombus.

66. A rectangle is _____ a square.

67. A rectangle _____ has congruent diagonals.

68. The diagonals of a square _____ bisect its angles.

69. A rhombus _____ has four congruent angles.

70. A rectangle _____ has perpendicular diagonals.