**Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Worksheet 8.4R**

**Period:\_\_\_\_\_\_\_\_\_\_\_\_\_ Geometry**

**Decide whether the statement is *sometimes, always,* or *never* true.**

1. A rectangle is a parallelogram.
2. A parallelogram is a rhombus.
3. A rectangle is a rhombus.
4. A square is a rectangle.

**Which of the following quadrilaterals have the given property? *Note: There may be more than one answer.***

**5.** All sides are congruent. **A.** Parallelogram

**6.** All angles are congruent. **B.** Rectangle

**7.**  The diagonals are congruent. **C.** Rhombus

**8.** Opposite angles are congruent. **D.** Square

**For any rectangle *ABCD*, decide whether the statement is *always*, *sometimes*, or *never* true. Draw a diagram!**

**9.**

**10.**

**11.**

**12.**

**For any rhombus *ABCD*, decide whether the statement is *always*, *sometimes*, or *never* true. Draw a diagram!**

**13.**

**14.**

**15.**

**16.**

**17.**

**18.**

**List each quadrilateral for which the statement is true (i.e. parallelogram, rectangle, rhombus, and/or square).**

**19.** It is equiangular.

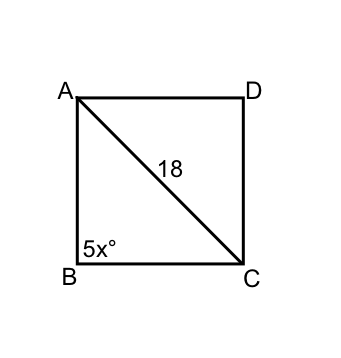
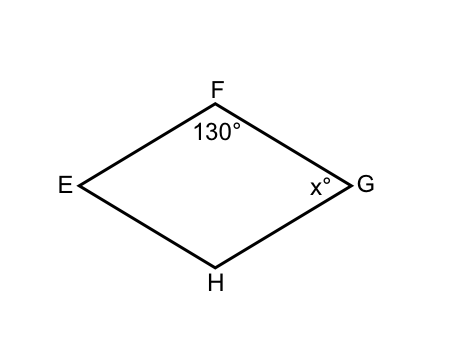
**20.** It is equiangular and equilateral.

**21.** The diagonals are perpendicular.

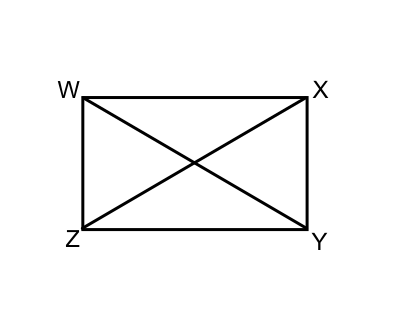
**22.** Opposite sides are congruent.

**23.** The diagonals bisect each other.

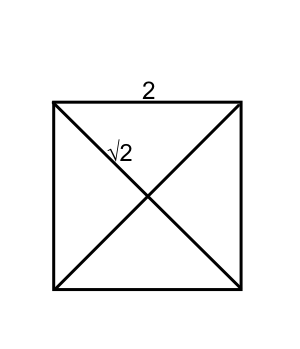
**24.** The diagonals bisect opposite sides.

**Find the value of *x*.**

**25.** *ABCD* is a square. **26.** *EFGH* is a rhombus.



**27.** *WZYZ* is a rectangle. The perimeter of is 24. and . Find *WY*.



***GHJK* is a square with diagonals intersecting at *L.* Given that *GH*=2 and , complete the statement.**

**28.** *HK*=\_\_\_\_\_\_\_\_

**29.** \_\_\_\_\_\_\_\_\_\_\_\_

**30.** \_\_\_\_\_\_\_\_\_\_\_\_

**31.** Perimeter of \_\_\_\_\_\_\_\_\_\_\_