Name _____ **Date** _____

LESSON 8.4

Practice B

For use with pages 533–540

For any rhombus *ABCD*, decide whether the statement is *always* or *sometimes* true. Draw a diagram and *explain* your reasoning.

1. $\angle ABC \cong \angle CDA$

2. $\overline{CA} \cong \overline{DB}$

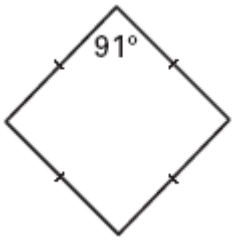
For any rectangle *FGHJ*, decide whether the statement is *always* or *sometimes* true. Draw a diagram and *explain* your reasoning.

3. $\angle F \cong \angle H$

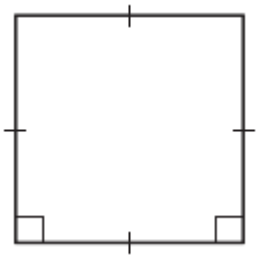
4. $\overline{GH} \cong \overline{HJ}$

Classify the quadrilateral. *Explain* your reasoning.

5.

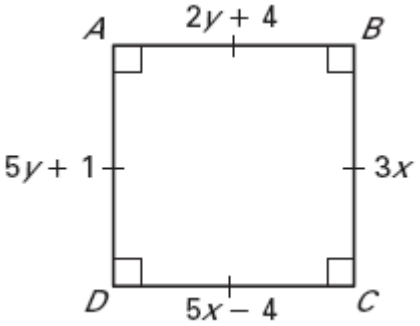


6.



Classify the special quadrilateral. *Explain* your reasoning. Then find the values of *x* and *y*.

7.



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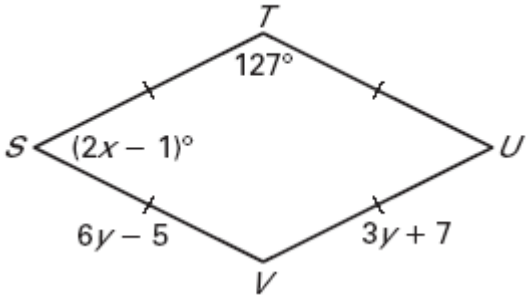


Name each quadrilateral—*parallelogram, rectangle, rhombus,* and *square*—for which the statement is true.

9. It is equilateral.

10. The diagonals are congruent.

11. It can contain obtuse angles.

12. It contains no acute angles.

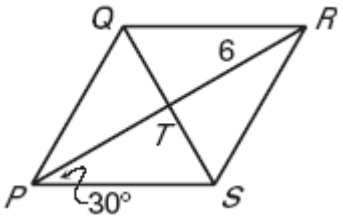
The diagonals of rhombus *PQRS* intersect at *T*. Given that $m\angle RPS = 30°$ and $RT = 6$, find the indicated measure.

13. $m\angle QPR$

14. $m\angle QTP$

15. RP

16. QT



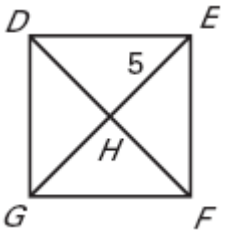
The diagonals of rectangle *WXYZ* intersect at *P*. Given that $m\angle YXZ = 50°$ and $XZ = 12$, find the indicated measure.

17. $m\angle WXZ$

18. $m\angle WPX$

19. PY

20. WX



The diagonals of square *DEFG* intersect at *H*. Given that $EH = 5$, find the indicated measure.

21. $m\angle GHF$

22. $m\angle DGH$

23. HF

24. DE