Geometry
Worksheet 8.4

Name _____

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

1. $\angle A \cong \angle C$

2. $\overline{DA} \cong \overline{AB}$

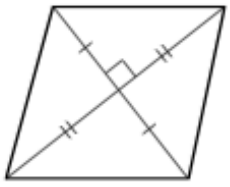
For any rectangle *FGHJ*, decide whether the statement is *always* or *sometimes* true. Draw a diagram and *explain* your reasoning.

3. $\angle G \cong \angle H$

4. $\overline{JF} \cong \overline{FG}$

Classify the parallelogram. *Explain* your reasoning.

5.



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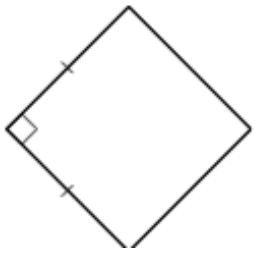

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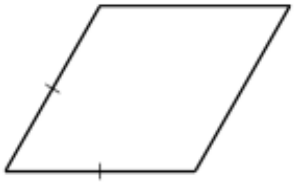

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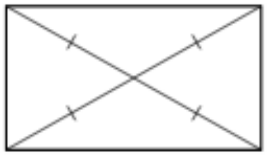

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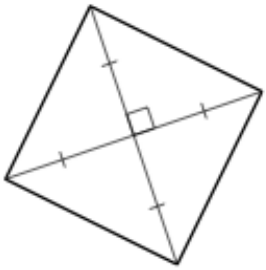
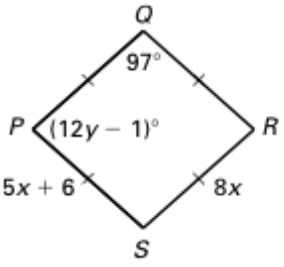


Classify the special quadrilateral. *Explain* your reasoning. Then find the values of *x* and *y*.

11.



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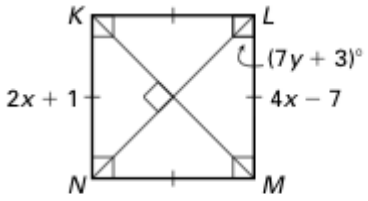
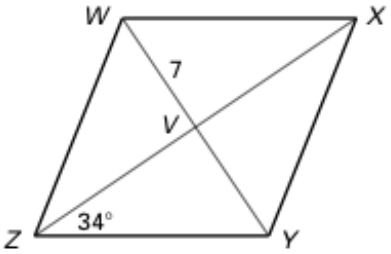


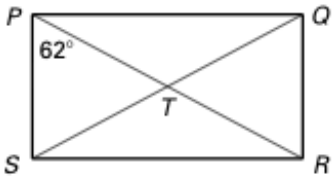
The diagonals of rhombus *WXYZ* intersect at *V*. Given that $m\angle XZY = 34°$ and *WV* = 7, find the indicated measure.

13. $m\angle WZV$ **14.** $m\angle XYZ$

15. WY **16.** XY



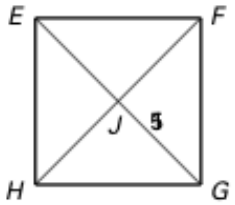
The diagonals of rectangle *PQRS* intersect at *T*. Given that $m\angle RPS = 62°$ and *QS* = 18, find the indicated measure.



17. $m\angle QPR$ **18.** $m\angle PTQ$

19. ST **20.** PR

The diagonals of square *EFGH* intersect at *J*. Given that *GJ* = 15, find the indicated measure.



21. $m\angle EJF$

22. $m\angle JFG$

23. FH

24. EJ