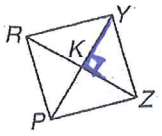
NAME Key DATE _____ PERIOD ____

8-5 Practice

Rhombi and Squares

Use rhombus $PRYZ$ with $RK = 4y + 1$, $ZK = 7y - 14$, $PK = 3x - 1$, and $YK = 2x + 6$.



1. Find PY.

40

2. Find RZ.

42

3. Find RY.

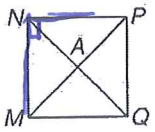
29

4. Find $m\angle YKZ$.

90

Rhombus diagonals are perpendicular

Use rhombus $MNPQ$ with $PQ = 3\sqrt{2}$, $PA = 4x - 1$, and $AM = 9x - 6$.



5. Find AQ.

3

6. Find $m\angle APQ$.

45

7. Find $m\angle MNP$.

90

8. Find PM.

6

COORDINATE GEOMETRY Given each set of vertices, determine whether $\square BEFG$ is a *rhombus*, a *rectangle*, or a *square*. List all that apply. Explain your reasoning.

9. $B(-9, 1)$, $E(2, 3)$, $F(12, -2)$, $G(1, -4)$

Rhombus; all sides ($\cong$) and the diagonals are perpendicular but not congruent

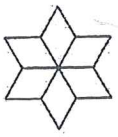
10. $B(1, 3)$, $E(7, -3)$, $F(1, -9)$, $G(-5, -3)$

Square; all sides are $\cong$ and the diagonals are perpendicular and congruent

11. $B(-4, -5)$, $E(1, -5)$, $F(-2, -1)$, $G(-7, -1)$

Rhombus; all sides are $\cong$ and the diagonals are perpendicular but not $\cong$

12. **TESSELLATIONS** The figure is an example of a tessellation. Use a ruler or protractor to measure the shapes and then name the quadrilaterals used to form the figure.



The figure consists of 6 congruent rhombi