LESSON 8-7

Practice A

Classifying Quadrilaterals

1. List the six major special quadrilaterals.

parallelogram, rhombus, rectangle, square, trapezoid, kite

Give all of the names that apply to each quadrilateral.

2. 

parallelogram, rhombus, rectangle, square

3. 

trapezoid

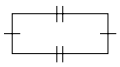
4. 

parallelogram

Give the name that best describes each quadrilateral.

5. 

rhombus

6. 

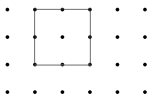
rectangle

7. 

trapezoid

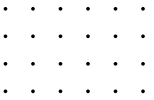
Draw each figure. If it is not possible to draw, explain why.

8. A rhombus that is also a square.



Possible answer is shown

9. A trapezoid that is also a rectangle.



It is impossible to draw. A trapezoid has exactly one pair of parallel sides, while a rectangle has two.

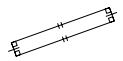
Copyright © by Holt, Rinehart and Winston. All rights reserved.

LESSON 8-7

Practice B

Classifying Quadrilaterals

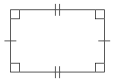
Give all of the names that apply to each quadrilateral. Then give the name that best describes it.

1. 

parallelogram, rectangle; rectangle

2. 

parallelogram; parallelogram

3. 

parallelogram rectangle; rectangle

4. 

trapezoid; trapezoid

5. 

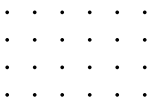
parallelogram, rhombus; rhombus

6. 

parallelogram, square, rectangle rhombus; square

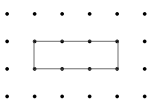
Draw each figure. If it is not possible to draw, explain why.

7. A rectangle that is not a parallelogram.



It is impossible to draw. All rectangles are parallelograms. A rectangle has two pairs of parallel sides, as does a parallelogram.

8. A rectangle that is not a square.



Copyright © by Holt, Rinehart and Winston. All rights reserved.

LESSON 8-7

Practice C

Classifying Quadrilaterals

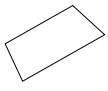
Give all of the names that apply to each quadrilateral. Then give the name that best describes it.

1. 

parallelogram; rectangle; rectangle

2. 

parallelogram, rhombus; rhombus

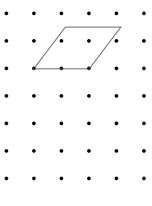
3. 

trapezoid

Draw each figure. If it is not possible to draw, explain why.

4. a rhombus that is not a rectangle

Possible answer is shown.



5. a trapezoid that is also a square

It is impossible to draw. A trapezoid has exactly one pair of parallel sides, while a square has two.

Name the types of quadrilaterals with each property.

6. exactly one pair of parallel sides trapezoid

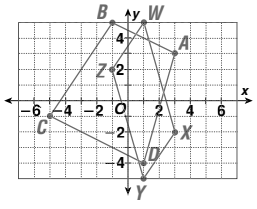
7. four congruent sides rhombus, square

8. Graph the points $A(3, 3)$, $B(-1, 5)$, $C(-5, -1)$, and $D(1, -4)$ and draw quadrilateral $ABCD$. What quadrilateral did you draw?

trapezoid

9. Graph the points $W(1, 5)$, $X(3, -2)$, $Y(1, -5)$, and $Z(-1, 2)$ and draw quadrilateral $WXYZ$. What quadrilateral did you draw?

parallelogram



Copyright © by Holt, Rinehart and Winston. All rights reserved.

LESSON 8-7

Reteach

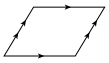
Classifying Quadrilaterals

Quadrilaterals are polygons that have 4 sides. In the figures below, arrows are used to indicate parallel sides, and tick marks are used to indicate congruent sides.

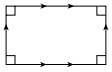
- A **trapezoid** is a quadrilateral with only one pair of parallel sides.



- A **parallelogram** is a quadrilateral with two pairs of parallel sides.



- A **rectangle** is a parallelogram with all four angles congruent.



- A **rhombus** is a parallelogram with all four sides congruent.



- A **square** is a rectangle with all four sides congruent.



Use the figures to complete the statements.



1. The figure is a trapezoid since it has one pair of parallel sides.



2. The figure is a parallelogram and a rhombus since it has two pair(s) of parallel sides, and four sides are congruent.



3. The figure is a parallelogram and a rhombus and a rectangle and a square since it has two pair(s) of parallel sides, four angles are congruent, and four sides are congruent.

Copyright © by Holt, Rinehart and Winston. All rights reserved.

Copyright © by Holt, Rinehart and Winston. All rights reserved.