## NAME

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Module 9 Characteristics of Geometric Shapes
Lesson 2 Quadrilaterals

## Lesson

 Notes 9.2
## Lesson Objectives

- Classify quadrilaterals.
- Use paper and physical models to determine the sum of the measures of interior angles of quadrilaterals.
- Find the missing measure of a quadrilateral.
- Compare quadrilaterals.


## Subtopic 1 Types of Quadrilaterals

Quadrilateral

- A $\qquad$ polygon
- $\qquad$ sides
- Each side intersects at points called $\qquad$ .

A quadrilateral has four $\qquad$ . A quadrilateral has four $\qquad$ .

A quadrilateral is named using $\qquad$ vertices.

A parallelogram is a quadrilateral with two pairs of $\qquad$ sides.

A rectangle is a parallelogram with four $\qquad$ angles.

A $\qquad$ is a parallelogram with four congruent sides.

A square is a $\qquad$ with four right angles and four congruent sides.

A trapezoid is a quadrilateral with exactly $\qquad$ pair of parallel sides.


Classify the figure in as many ways as possible. Then, name the figure two different ways.


Classify the figure on the right in as many ways as possible.


Give the most specific classification possible for each figure.


Tell whether each statement is true or false. Explain your answer.

- Every rectangle is a parallelogram.
- A square is never a trapezoid.
- All quadrilaterals are trapezoids.


## Subtopic 2 Angles of Quadrilaterals

Quadrilateral Sum Property
The sum of the angle measures of a quadrilateral is

Find the value of $x$.



