

Name: \_\_\_\_\_ Section: \_\_\_\_\_



### Homework:

This week we will start Chapter 25 (Define Two-Dimensional Shapes). Please complete homework daily based on the schedule provided below.

**Please do not work ahead on homework assignments.**

**Lessons and Definitions are included in the packet.**

### Reminders:

Please have your child use Reflex Math to master and reinforce their fact fluency. The 3rd Grade curriculum depends on a strong foundation in multiplication and division facts.

[Additional practice is available on HMH](#)

### Notes:

Please upload homework packet on Archie no later than **Sunday, April 21st**.

Feel free to contact me with any questions or concerns at [diana.charaf@archimedean.org](mailto:diana.charaf@archimedean.org)

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Monday, April 15th                      lessons 00.1 and 00.2 on IXL

Tuesday, April 16th                    pages: 1141 and 1142

Wednesday, April 17th                pages: 1147 and 1148

Thursday, April 18th                  pages: 1153 and 1154

Friday, April 19th                      pages: 1159 and 1160  
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# Lines, line segments, and rays

Points, lines, line segments, and rays are the building blocks of geometry!

## What is a point?

A **point** is an exact location or position.

You can name a point using a letter. This point is named point A.



## What is a line?

A **line** is a collection of points in a straight path that goes on forever in both directions.

You can name a line using two points on the line and a symbol with arrows pointing in both directions. This line is named  $\overleftrightarrow{AB}$ .



## What is a line segment?

A **line segment** is part of a line. It has two endpoints.

You can name a line segment using its two endpoints and a symbol without arrows. This line segment is named  $\overline{AB}$ .



## What is a ray?



A **ray** is part of a line. It has one endpoint and continues forever in the other direction.

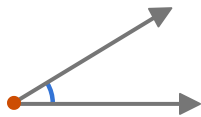
You can name a ray using its endpoint, one other point on the ray, and a symbol with an arrow pointing in one direction. This ray is named  $\overrightarrow{AB}$ .



# Types of angles

## What is an angle?

An **angle** is formed by two rays that share a common endpoint, or **vertex**.

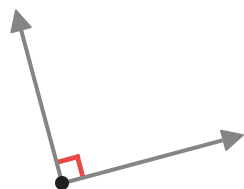


The size of the angle depends on how widely or narrowly the two rays are spread apart. The wider open an angle is, the greater its measure. Angles are measured in degrees.

Angles have special names based on their degree measures.

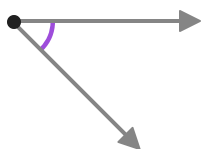
## Right angles

A **right angle** measures exactly  $90^\circ$ . It is the same shape as the corner of a square.



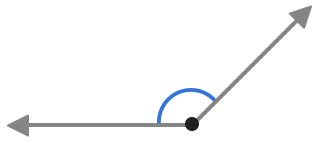
## Acute angles

An **acute angle** measures between  $0^\circ$  and  $90^\circ$ . It is narrower than a right angle.



## Obtuse angles

An **obtuse angle** measures between  $90^\circ$  and  $180^\circ$ . It is wider than a right angle.



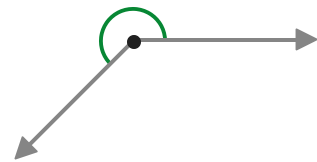
## Straight angles

A **straight angle** measures exactly  $180^\circ$ . The rays form a line.



## Reflex angles

A **reflex angle** measures between  $180^\circ$  and  $360^\circ$ . It is wider than a straight angle.



## Full angles

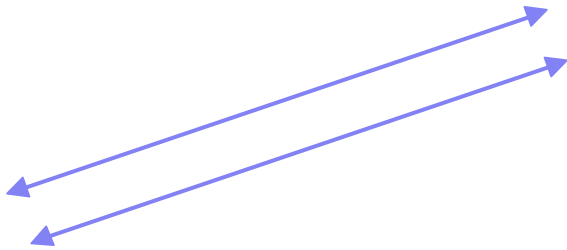
A **full angle** measures exactly  $360^\circ$ . It is one complete rotation.



# Parallel and perpendicular lines

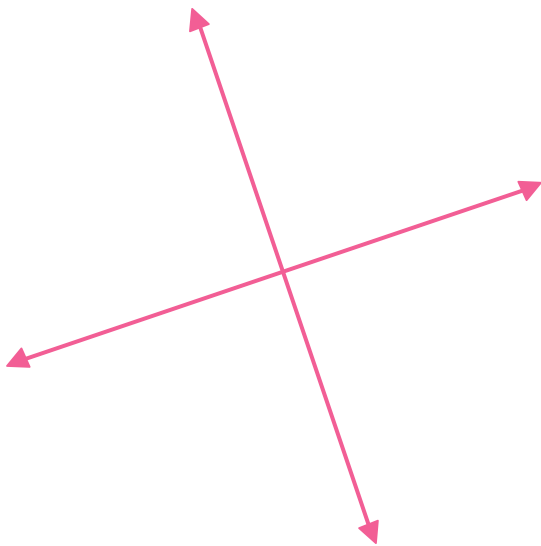
## What are parallel lines?

**Parallel lines** are lines that always stay the same distance apart from each other. They will never meet.



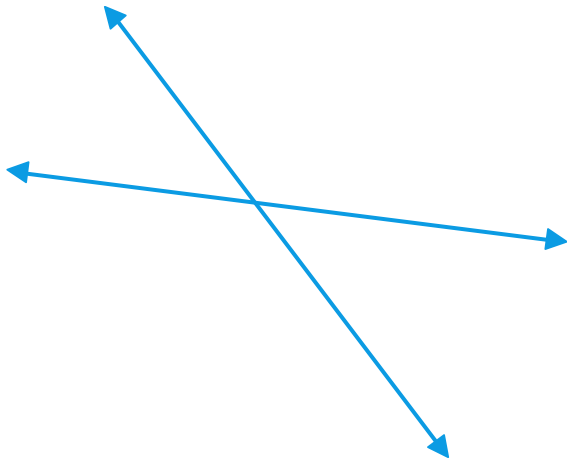
## What are perpendicular lines?

**Perpendicular lines** are lines that meet at right angles.



## What are intersecting lines?

**Intersecting lines** are lines that meet or cross each other. They share a common point called the **point of intersection**.

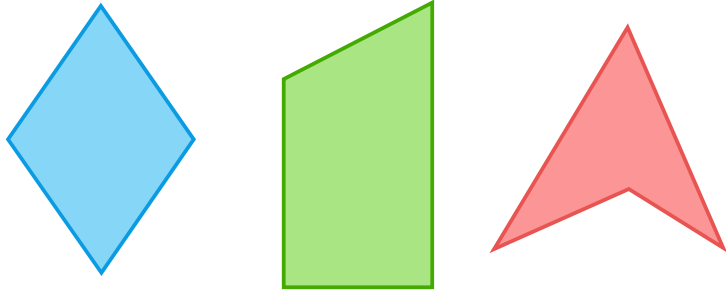


Perpendicular lines intersect each other at  $90^\circ$  angles.

# Types of quadrilaterals

## What is a quadrilateral?

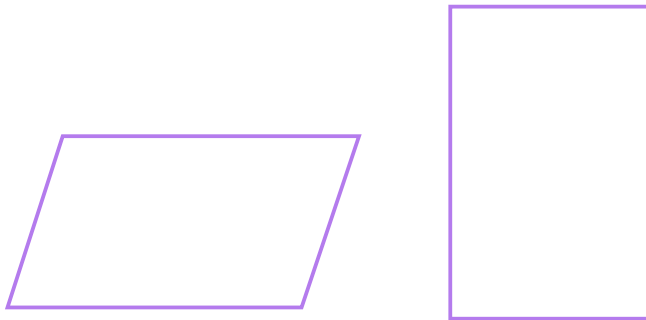
A quadrilateral is a two-dimensional shape with four sides and four angles.



Some quadrilaterals have special names, such as trapezoid, parallelogram, rectangle, rhombus, and square. You can use the properties of quadrilaterals to name them. Let's find out how!

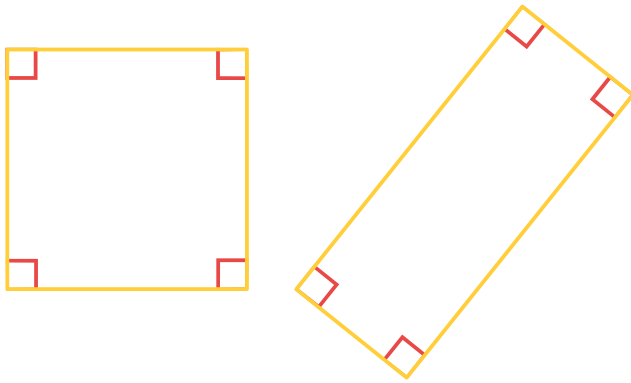
## Classifying quadrilaterals

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

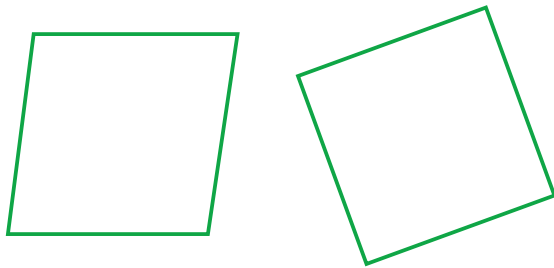


A **rectangle** is a parallelogram with four right angles.

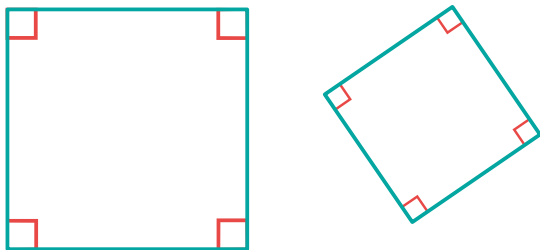




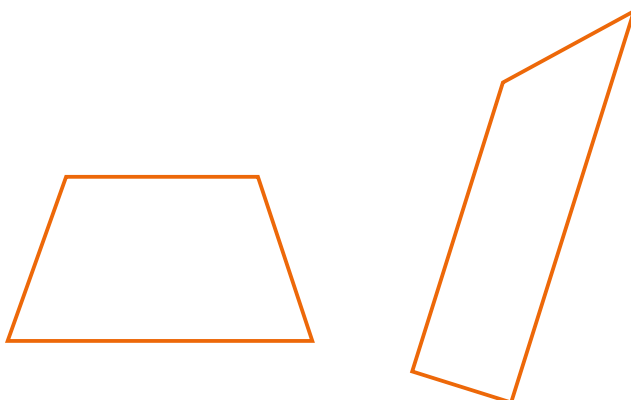
A **rhombus** is a parallelogram with four equal sides.



A **square** is a parallelogram with four equal sides and four right angles.



A **trapezoid** is a quadrilateral with exactly one pair of parallel sides. In the United Kingdom, this shape is called a **trapezium**.



# Explore Lines, Rays, and Angles

**Go Online**

Interactive Examples

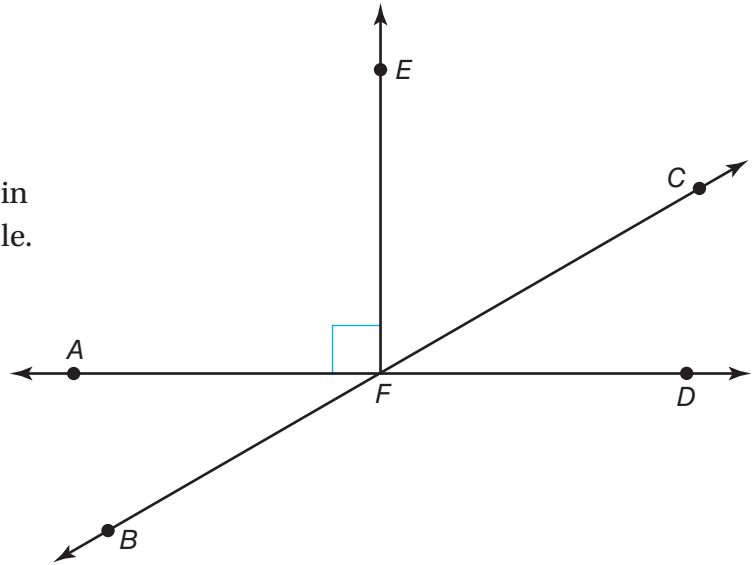
**Use the figure for 1 and 2.**

1. Name a line. \_\_\_\_\_
2. Name a right angle. \_\_\_\_\_
3. What shape has no endpoints and continues in both directions with no end? Draw an example.

\_\_\_\_\_

4. What shape shows a specific location? Draw an example.

\_\_\_\_\_



## Problem Solving

5. How many right angles are in this shape?



\_\_\_\_\_

6. Draw and label  $\overrightarrow{VW}$

7.  *Math* Draw and label a shape that has 4 points, 2 rays, 1 line, and 3 line segments.

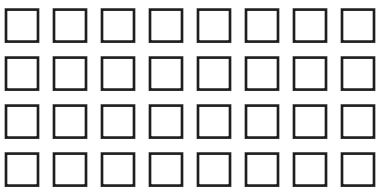
Lesson Check

8. Draw line segment  $ST$ .
9. What is part of a line, has one endpoint, and continues in one direction?

\_\_\_\_\_

Spiral Review

10. What multiplication equation does the array show?
11. What is the unknown factor and quotient?



$9 \times \square = 27$   
 $27 \div 9 = \square$

\_\_\_\_\_  
\_\_\_\_\_

12. What fraction is equivalent to  $\frac{4}{8}$ ?



13. Mr. MacTavish has 30 students from his class going on a field trip to the zoo. He puts 6 students in each group. How many groups of students will he make?

\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

# Describe Angles in Shapes

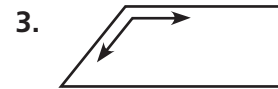
Go Online

Interactive Examples

Use the corner of a sheet of paper to tell whether the angle is a *right angle*, *less than a right angle*, or *greater than a right angle*.



less than a right  
angle



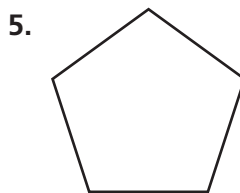
Write how many of each type of angle the shape has.



\_\_\_\_\_ right angle(s)

\_\_\_\_\_ less than a right angle

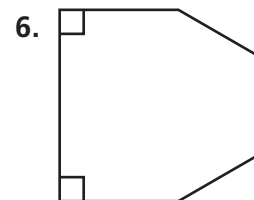
\_\_\_\_\_ greater than a right  
angle



\_\_\_\_\_ right angle(s)

\_\_\_\_\_ less than a right angle

\_\_\_\_\_ greater than a right  
angle



\_\_\_\_\_ right angle(s)

\_\_\_\_\_ less than a right angle

\_\_\_\_\_ greater than a right  
angle


## Problem Solving

7. Jeff has a square piece of art paper. He cuts across it from one corner to the opposite corner to make two pieces. What is the total number of sides and angles in both of the new shapes?

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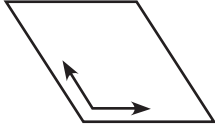
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8.  **WRITE** *Math* Draw an example of a shape that has at least one square corner, one angle less than a right angle, and one angle greater than a right angle. Label the angles.

## Lesson Check

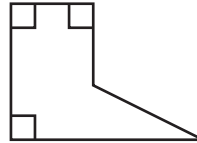
9. What describes this angle? Write *right angle*, *less than a right angle*, or *greater than a right angle*.



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10. How many right angles does this shape have?

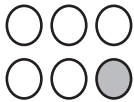


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## Spiral Review

11. What fraction of the group is shaded?



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12. Compare.

$$\frac{4}{8} \bigcirc \frac{3}{8}$$

13. What is straight, continues in both directions, and does not end?

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14. What is straight, has one endpoint, and continues in the other direction without ending?

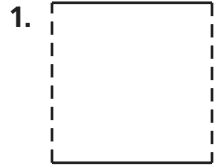
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# Describe Sides of Shapes

Go Online

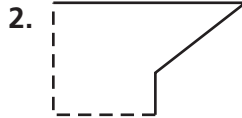
Interactive Examples

Look at the dashed sides of the polygon. Tell if they appear to be *intersecting*, *perpendicular*, or *parallel*. Write all the words that describe the sides.

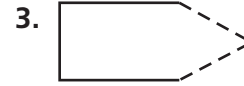


parallel

\_\_\_\_\_



\_\_\_\_\_



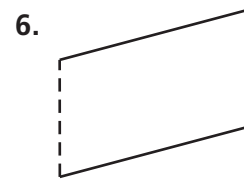
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\_\_\_\_\_



\_\_\_\_\_



\_\_\_\_\_

## Problem Solving

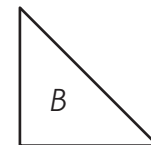
Use shapes A–D for 7 and 8.


7. Which shapes appear to have parallel sides?

\_\_\_\_\_

8. Which shapes appear to have perpendicular sides?

\_\_\_\_\_



9.  **WRITE** *Math* Give some examples of perpendicular lines inside or outside your classroom.

\_\_\_\_\_

\_\_\_\_\_

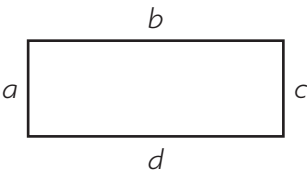
Lesson Check

10. How many pairs of parallel sides does the shape appear to have?



\_\_\_\_\_

11. Which sides appear to be perpendicular?



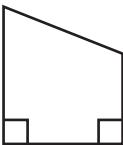
\_\_\_\_\_

Spiral Review

12. Samira tiles an area that is 2 feet wide and 12 feet long. How large is the area she tiles?

\_\_\_\_\_

13. How many angles greater than a right angle does this shape have?



\_\_\_\_\_

14. How many line segments does this shape have?



\_\_\_\_\_

15. What fraction names the shaded part?



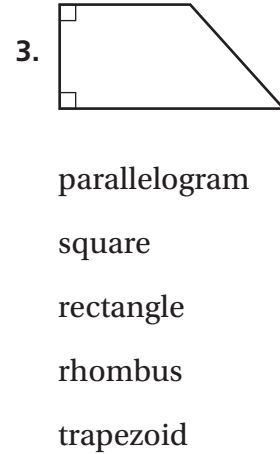
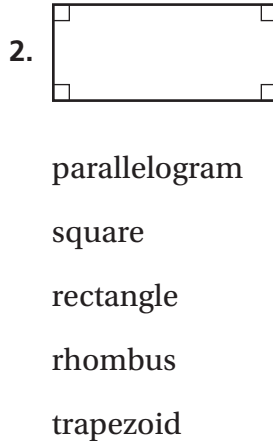
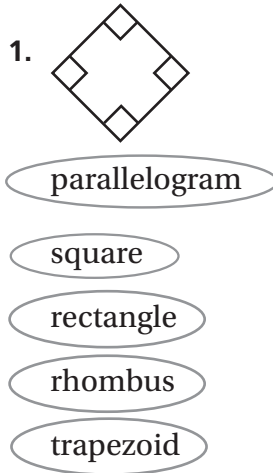
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# Define Quadrilaterals

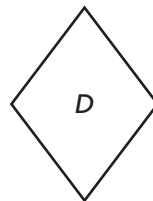
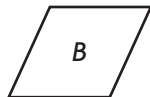
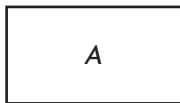
Go Online

Interactive Examples

Circle all the words that describe the quadrilateral.



Use the quadrilaterals below for 4–6.



4. Which quadrilaterals appear to have no right angles?

\_\_\_\_\_

5. Which quadrilaterals appear to have 4 right angles?

\_\_\_\_\_



6. Which quadrilaterals appear to have 4 sides of equal length?

\_\_\_\_\_

## Problem Solving

7. A picture on the wall in Pilar's classroom has 4 right angles, 4 sides of equal length, and 2 pairs of opposite sides that are parallel. What quadrilateral best describes the picture?

\_\_\_\_\_

8.  **WRITE**  *Math* Explain how a trapezoid and a rectangle are different.

\_\_\_\_\_

\_\_\_\_\_

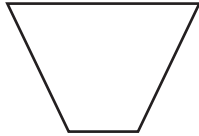
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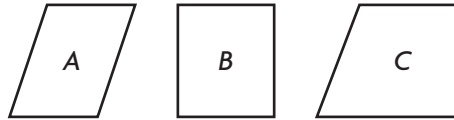
## Lesson Check

9. What word describes the quadrilateral shown below?



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10. Which quadrilaterals appear to have 2 pairs of opposite sides that are parallel?



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## Spiral Review

11. Use  $<$ ,  $>$ , or  $=$  to compare.

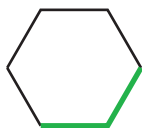
$$\frac{3}{8} \bigcirc \frac{5}{8}$$

12. Which of the following is not a multiple of 5?

10, 35, 45, 52, 55

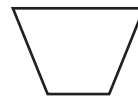
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13. Which words describe the green sides shown? Write *intersecting*, *perpendicular*, or *parallel*.



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14. How many right angles does this shape have?



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