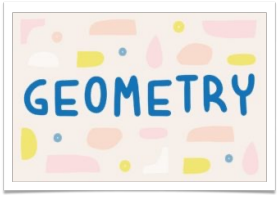
Name:_____ Section: _____




**Homework:**

This week we will start Chapter 26 (Classify Two-Dimensional Quadrilaterals and Identify Line Symmetry). Please complete homework daily based on the schedule provided below.

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

**Chapter 25 test on Wednesday, April 24. Pages: 1161 through 1166 are practice for the test, also review all definitions that 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 28th.**

Feel free to contact me with any questions or concerns at diana.charaf@archimedean.org

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| | |
|---|---|
| **Monday, April 22nd** | **pages: 1161. 1162, 1163** |
| **Tuesday, April 23rd** | **pages: 1164, 1165, 1166** |
| **Wednesday, April 24th** | **Lesson OO.3 on IXL** |
| **Thursday, April 25th** | **Lessons PP.1 and PP.2 on IXL** |
| **Friday, April 26th** | **No HW** |

---

# 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?

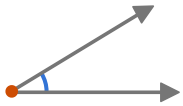
A **ray** is part of a line. It has one endpoint and continues forever in the other direction.

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**.

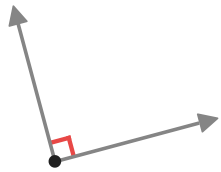


The size of the angle depends on how widely or narrowly the two rays are spread apart. The wider open an angle is, the greater its measure. Angles are measured in degrees.

Angles have special names based on their degree measures.

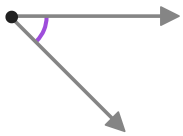
## Right angles

A **right angle** measures exactly 90°. It is the same shape as the corner of a square.



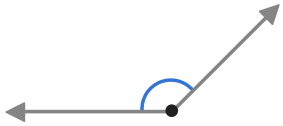
## Acute angles

An **acute angle** measures between 0° and 90°. It is narrower than a right angle.



## Obtuse angles

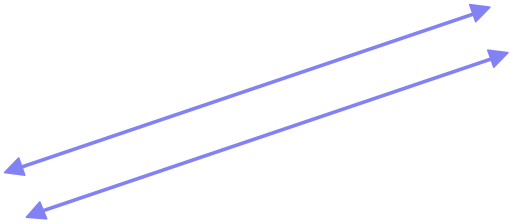
An **obtuse angle** measures between 90° and 180°. It is wider than a right angle.



# Parallel and perpendicular lines

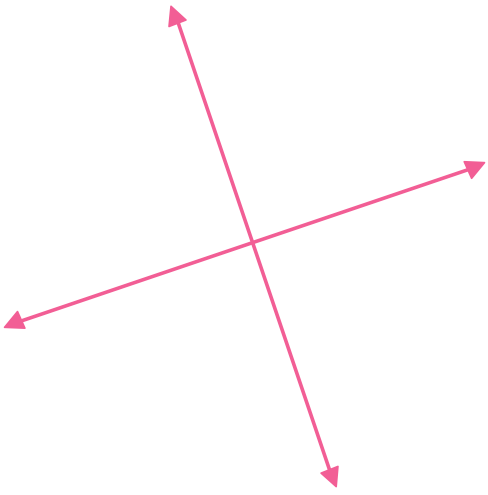
## What are parallel lines?

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



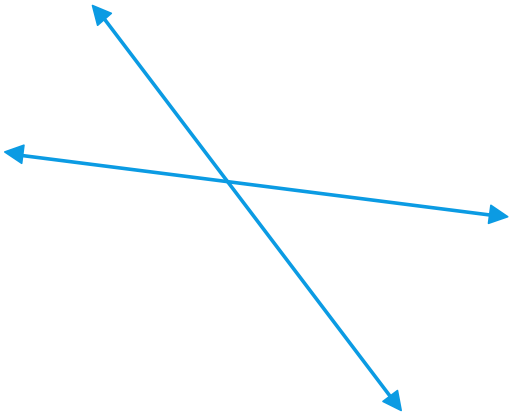
## What are perpendicular lines?

**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**.

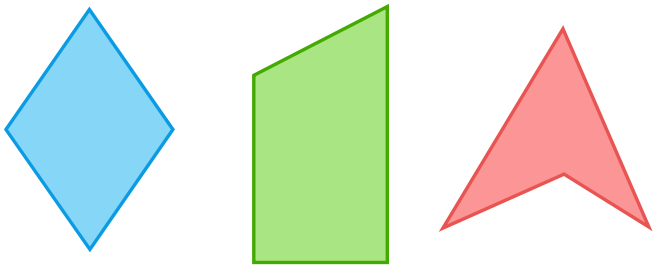


Perpendicular lines intersect each other at 90° angles.

# Types of quadrilaterals

## What is a quadrilateral?

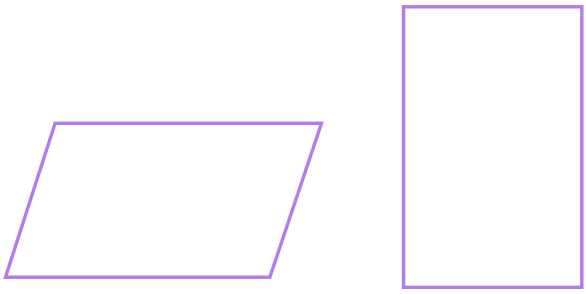
A quadrilateral is a two-dimensional shape with four sides and four angles.



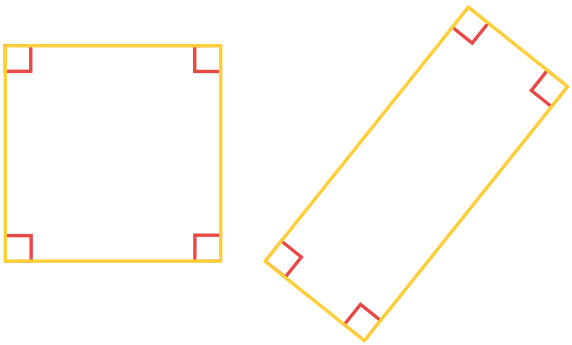
Some quadrilaterals have special names, such as trapezoid, parallelogram, rectangle, rhombus, and square. You can use the properties of quadrilaterals to name them. Let's find out how!

## Classifying quadrilaterals

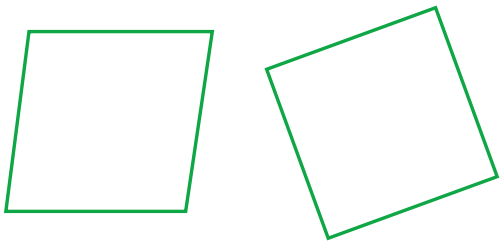
A **parallelogram** is a quadrilateral with two pairs of parallel sides.



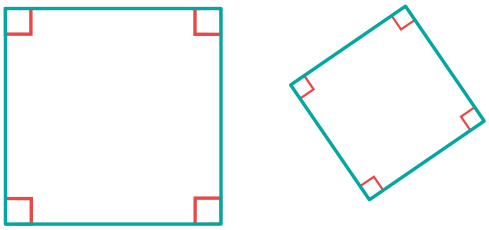
A **rectangle** is a parallelogram with four right angles.



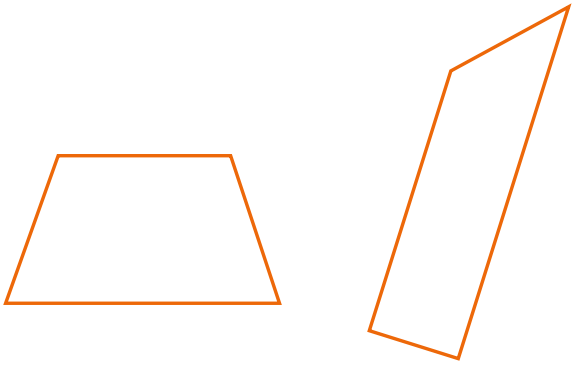
A **rhombus** is a parallelogram with four equal sides.



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**.



Name _____

Chapter 25

# Chapter Review

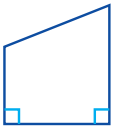
**1.** Circle the words that describe the angle marked in this shape.

right angle greater than right angle  less than right angle

**2.** Circle the words that describe the sides marked in this polygon.

parallel  intersecting  perpendicular

**3.** Mikael saw a painting that included this shape.



For problems 3a–3d, choose True or False for each statement about the shape.

| | | | |
|---|---|---|---|
| 3a. | The shape has no right angles. | ○ True | ○ False |
| 3b. | The shape has 2 angles greater than a right angle. | ○ True | ○ False |
| 3c. | The shape has 2 right angles. | ○ True | ○ False |
| 3d. | The shape has 1 angle greater than a right angle. | ○ True | ○ False |

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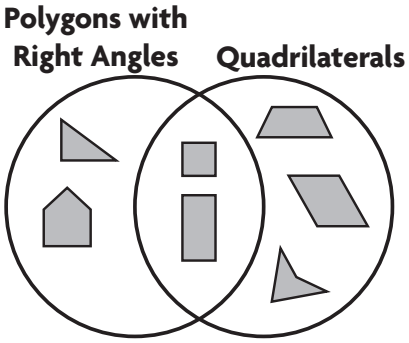
4. Fran used a Venn diagram to sort shapes.

## Part A

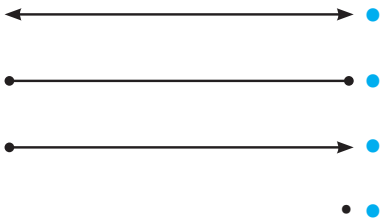
Draw another plane shape that belongs inside the left circle of the diagram but NOT in the section where the circles overlap.




## Part B

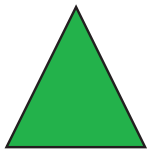
How can you describe the shapes in the section where the circles overlap?

5. Match each object in the left column with its name in the right column.



- point
- line
- ray
- line segment

6. Describe the angles and sides of this triangle.



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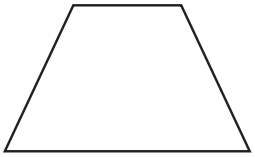
Name _____

**7.** Which words describe this shape. Mark all that apply.

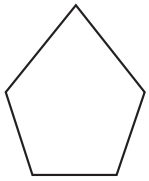
rectangle rhombus quadrilateral square

Ⓐ Ⓑ Ⓒ Ⓓ

**8.** How many line segments does each shape have?

8a. 

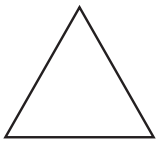
_____ line segments

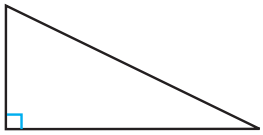
8b. 

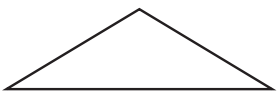
_____ line segments

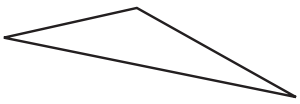
**9.** Han drew a triangle with 1 angle greater than a right angle.

For Problems 9a–9d, choose Yes or No to tell whether the triangle could be the triangle Han drew.

9a.  ○ Yes ○ No

9b.  ○ Yes ○ No

9c.  ○ Yes ○ No

9d.  ○ Yes ○ No

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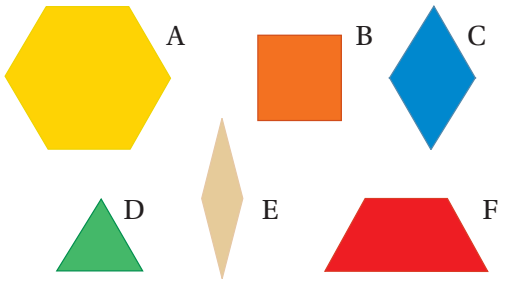
**10.** Look at this group of polygons.




## Part A

To answer each question, name each polygon by writing its letter.

10a. Which polygons appear to have at least 1 pair of parallel sides? _____

10b. Which polygons appear to have perpendicular sides? _____

10c. Which polygons have intersecting sides? _____

## Part B

List as many polygons as possible that appear to fit into each category. Use the letters of the polygons for your answers.

10d. rectangle _____

10e. trapezoid _____

10f. parallelogram _____

**11.** Teresa drew a quadrilateral that had 4 sides of equal length and no right angles. What quadrilateral did she draw?

_____

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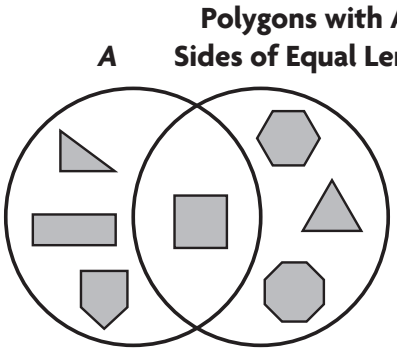
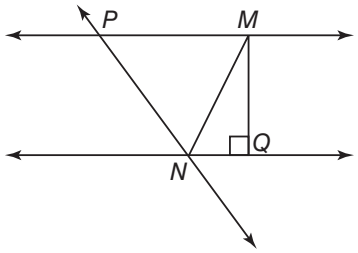
Name _____

**12.** Rhea used a Venn diagram to sort shapes. What label could she use for circle *A*?




_____

**13.** Use the figure for problems 13a–13d.



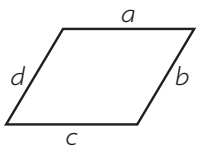

13a. Name a ray. _____

13b. Name a line segment. _____

13c. Name a point. _____

13d. Name a line. _____

**14.** Brad drew a quadrilateral. Select the pairs of sides that appear to be parallel. Mark all that apply.




Ⓐ *a* and *b*

Ⓑ *b* and *d*

Ⓒ *c* and *a*

Ⓓ *d* and *c*

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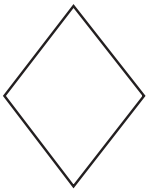
**15.** Circle all the words that describe the quadrilateral.



rectangle

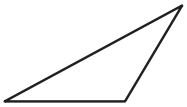
parallelogram

square

rhombus

quadrilateral

**16.** The triangle at the right has one angle greater than a right angle. What statements describe the other angles? Mark all that apply.



Ⓐ At least one is less than a right angle.

Ⓑ One is a right angle.

Ⓒ Both are less than a right angle.

Ⓓ One is greater than a right angle.

**17.** Write *all* or *some* to complete the sentences for problems 17a–17c.

17a. The opposite sides of _____ rhombuses are parallel.

17b. _____ squares are rhombuses.

17c. _____ rectangles are squares.

**18.** For problems 18a–18d, choose True or False for each description of a ray.

| | | | |
|---|---|---|---|
| 18a. | straight | ○ True | ○ False |
| 18b. | has 2 endpoints | ○ True | ○ False |
| 18c. | part of a line | ○ True | ○ False |
| 18d. | continues in 1 direction | ○ True | ○ False |

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