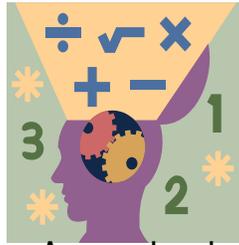


Name: \_\_\_\_\_ Section: 4A, 4B, 4C, 4D, 4E



### Homework

Happy New Year Scholars and Parents. As we begin the New Year, students will be learning about Two-Dimensional Shapes. They will learn to identify and draw points, lines, rays, and angles. Students will classify triangles by the size of their angles. They will learn to identify and draw parallel and perpendicular lines. Students will sort quadrilaterals and they will determine lines of symmetry. **There is a Quiz on Monday January 13, 2020.**

### Think Central Information

Scholars have access to the Think Central GO MATH! Student Interactive Book which reviews Chapter 10 and provides tutorial videos of the daily lesson. For additional practice, I have assigned practice module on Think Central to help scholars develop a deeper understanding for Chapter 10. Please encourage your children to use the program to prepare for assessments. Please contact me with any questions or concerns at [morales.zervos@archimedean.org](mailto:morales.zervos@archimedean.org).

### Notes

Scholars **MUST** prove and show all their work. If additional space is needed, please feel free to attach lined paper. Failure to show your work will result in a lower grade.

**i-Ready** – Individualized math i-Ready lessons are due by Sunday evening for all scholars.

<u>Monday</u>	January 6 <sup>th</sup>	– 10.1 (1 page)
<u>Tuesday</u>	January 7 <sup>th</sup>	– 10.2 (1 page)
<u>Wednesday</u>	January 8 <sup>th</sup>	– 10.3 (1 page)
<u>Thursday</u>	January 9 <sup>th</sup>	– 10.4 (1 page)
<u>Friday</u>	January 10 <sup>th</sup>	– Points, Line and Rays (1 page)

Parents please initial below each day acknowledging your child has completed the assigned homework. **Homework will be checked daily in class. Completed homework packets are due on Monday January 13<sup>th</sup>, 2020 for a grade.**

<u>Monday</u> January 6 <sup>th</sup>	<u>Tuesday</u> January 7 <sup>th</sup>	<u>Wednesday</u> January 8 <sup>th</sup>	<u>Thursday</u> January 9 <sup>th</sup>	<u>Friday</u> January 10 <sup>th</sup>

Name \_\_\_\_\_

## Lines, Rays, and Angles



**COMMON CORE STANDARD** MACC.4.G.1.1

Draw and identify lines and angles, and classify shapes by properties of their lines and angles.

Draw and label an example of the figure.

1. obtuse  $\angle ABC$

2.  $\overrightarrow{GH}$

3. acute  $\angle JKL$

4.  $\overline{BC}$

Use the figure for 5–8.

5. Name a line segment.

\_\_\_\_\_

6. Name a right angle.

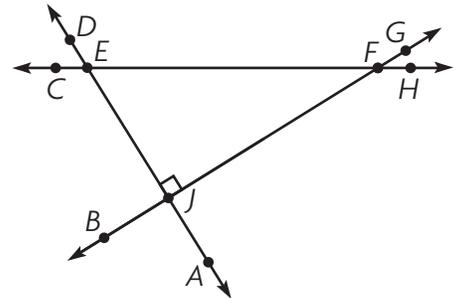
\_\_\_\_\_

7. Name an obtuse angle.

\_\_\_\_\_

8. Name a ray.

\_\_\_\_\_



## Problem Solving **REAL WORLD**

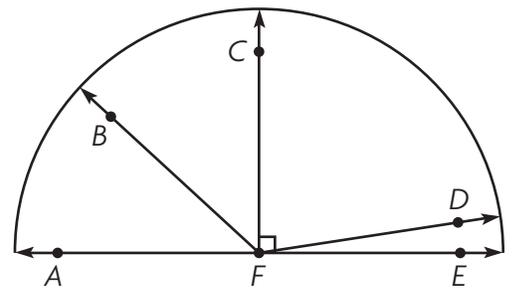
Use the figure at the right for 9–11.

9. Classify  $\angle AFD$ . \_\_\_\_\_

10. Classify  $\angle CFE$ . \_\_\_\_\_

11. Name two acute angles.

\_\_\_\_\_



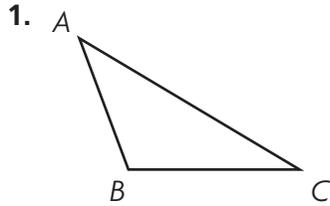
Name \_\_\_\_\_

## Classify Triangles

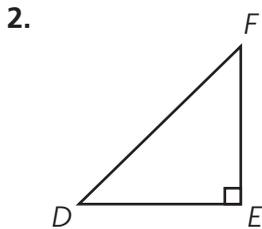


**COMMON CORE STANDARD MACC.4.G.1.2**  
Draw and identify lines and angles and classify shapes by properties of their lines and angles.

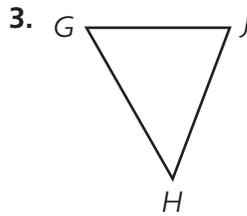
Classify each triangle. Write *acute*, *right*, or *obtuse*.



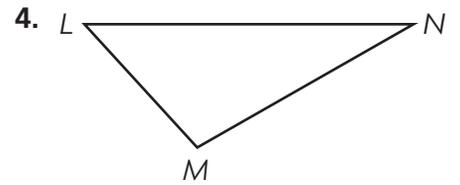
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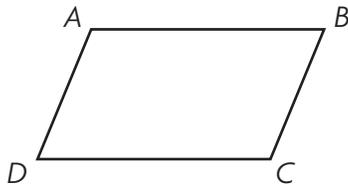
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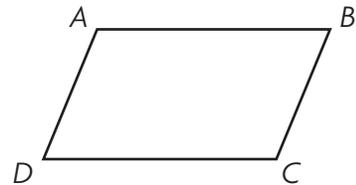
## Problem Solving REAL WORLD

5. Use figure  $ABCD$  below. Draw a line segment from point  $B$  to point  $D$ . Name and classify the triangles formed.



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

6. Use figure  $ABCD$  below. Draw a line segment from point  $A$  to point  $C$ . Name and classify the triangles formed.



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

Name \_\_\_\_\_

## Parallel Lines and Perpendicular Lines



**COMMON CORE STANDARD** MACC.4.G.1.1

Draw and identify lines and angles, and classify shapes by properties of their lines and angles.

Use the figure for 1–3.

1. Name a pair of lines that appear to be perpendicular.

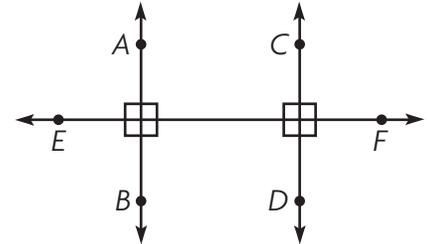
\_\_\_\_\_

2. Name a pair of lines that appear to be parallel.

\_\_\_\_\_

3. Name another pair of lines that appear to be perpendicular.

\_\_\_\_\_



Draw and label the figure described.

4.  $\overrightarrow{MN}$  and  $\overrightarrow{PQ}$  intersecting at point  $R$

5.  $\overrightarrow{WX} \parallel \overrightarrow{YZ}$

6.  $\overrightarrow{FH} \perp \overrightarrow{JK}$

## Problem Solving REAL WORLD

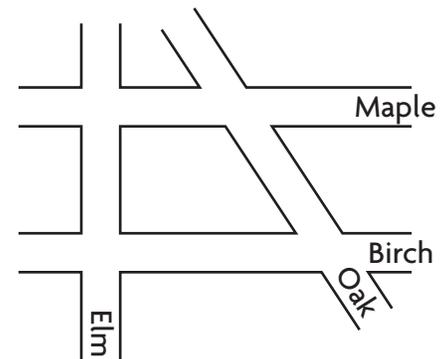
Use the street map for 7–8.

7. Name two streets that intersect but do not appear to be perpendicular.

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

8. Name two streets that appear to be parallel to each other.

\_\_\_\_\_



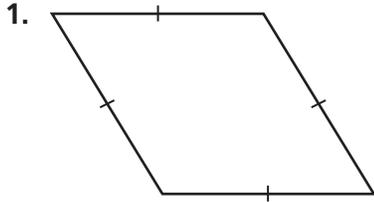
Name \_\_\_\_\_

## Classify Quadrilaterals



**COMMON CORE STANDARD** MACC.4.G.1.2  
 Draw and identify lines and angles and classify shapes by properties of their lines and angles.

Classify each figure as many ways as possible. Write *quadrilateral*, *trapezoid*, *parallelogram*, *rhombus*, *rectangle*, or *square*.



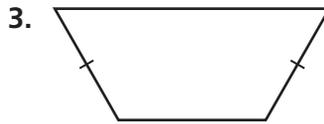
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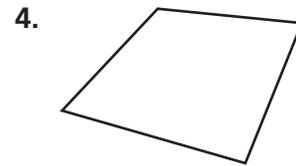
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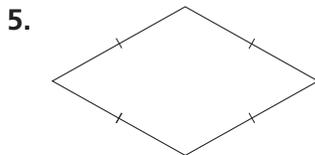
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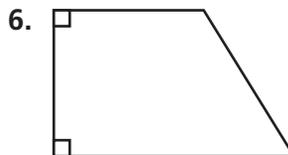
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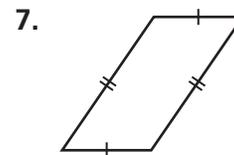
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\_\_\_\_\_

\_\_\_\_\_



\_\_\_\_\_

\_\_\_\_\_

## Problem Solving **REAL WORLD**

8. Alan drew a polygon with four sides and four angles. All four sides are equal. None of the angles are right angles. What figure did Alan draw?

\_\_\_\_\_

\_\_\_\_\_

9. Teresa drew a quadrilateral with 2 pairs of parallel sides and 4 right angles. What quadrilateral could she have drawn?

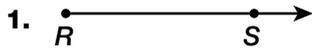
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# Points, Lines, and Rays

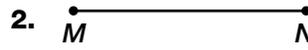
Name each figure.

**Ask Yourself**

- Which letters do I use to name each figure?
- Do I need to write the letters in a certain order?



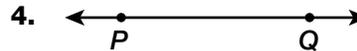
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\_\_\_\_\_

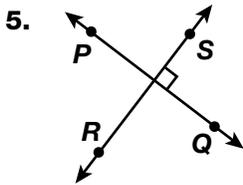


\_\_\_\_\_

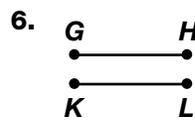


\_\_\_\_\_

Describe each pair of lines. Use symbols if possible.



\_\_\_\_\_



\_\_\_\_\_

Draw and label each figure.

7. Ray  $BC$

\_\_\_\_\_

8. Point  $Q$

\_\_\_\_\_

9. Line  $RT$

\_\_\_\_\_

10. Ray  $AB$

\_\_\_\_\_

11. Straight  $\angle TUV$

\_\_\_\_\_

12. Line segment  $CD$

\_\_\_\_\_

13. Acute  $\triangle XYZ$

\_\_\_\_\_

14. Scalene  $\triangle ABC$

\_\_\_\_\_

15. Right  $\triangle CAT$

\_\_\_\_\_

## Guided Geometry Notes

A \_\_\_\_\_ is an exact location in space; it is pictured by a dot.



A \_\_\_\_\_ is a straight path between two endpoints.



A \_\_\_\_\_ is a straight path that goes on forever in **both** directions.



A \_\_\_\_\_ is a straight path, with one endpoint that goes on forever in **the other** direction.



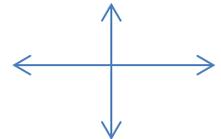
\_\_\_\_\_ **lines** are lines that are always the same distance apart and NEVER intersect.



\_\_\_\_\_ **lines** are lines that cross at exactly one point.



\_\_\_\_\_ are lines that intersect to form four right angles.



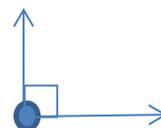
An \_\_\_\_\_ is formed by two rays connecting at the same endpoint. The shared endpoint is called a \_\_\_\_\_.

There are four types of angles: \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_.

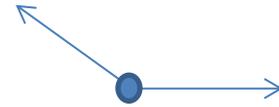
- An \_\_\_\_\_ **angle** measures less than  $90^\circ$  and opens less than a right angle.



- A \_\_\_\_\_ **angle** measures exactly  $90^\circ$  and forms a square corner.



- An \_\_\_\_\_ **angle** measures greater than  $90^\circ$  opens greater than a right angle but less than an acute.



- A \_\_\_\_\_ **angle** forms a line.



- A \_\_\_\_\_ **is** a polygon with three sides and three angles.
- A \_\_\_\_\_ **triangle** has 3 acute angles
- A \_\_\_\_\_ **triangle** has 1 obtuse angle.
- A \_\_\_\_\_ **triangle** has 1 right angle.
- A \_\_\_\_\_ **triangle** has 3 equal sides.
- A \_\_\_\_\_ **triangle** has 2 equal sides.
- A \_\_\_\_\_ **triangle** has no equal sides.

\_\_\_\_\_ are polygons with four sides and four angles.

- \_\_\_\_\_: Four sides are the same length. There are four right angles.  
Two pairs of parallel sides
- \_\_\_\_\_: Two pairs of parallel sides, two pairs of sides of equal length and four right angles
- \_\_\_\_\_: two pairs of parallel sides, two pairs of sides of equal length
- \_\_\_\_\_: two pairs of parallel sides; all sides are the same length
- \_\_\_\_\_: only one pair of parallel sides