

**Name:** \_\_\_\_\_

**College:** \_\_\_\_\_

# 4th Grade Math

**Week of: 2/1-2/5**

Spelman



College®



1867

**HOWARD**  
**UNIVERSITY**

# **Monday**

## **Date: February 1**

**Learning Target:** Use right angles to determine whether angles are equal to, greater than, or less than right angles. Draw right, obtuse, and acute angles.

**Standards:** 4.NBT.4 4.G.1

**Do Now:**

$$30 \times 25$$

$$437 \div 3$$

## **Concept Development**

### **Note Catcher for Paper Folding Activity:**

I wonder?

I notice:

### **Vocabulary:**

**Right Angle:**

**Acute Angle:**

**Obtuse Angle:**

**Straight Line:**

# Let's Work Together!



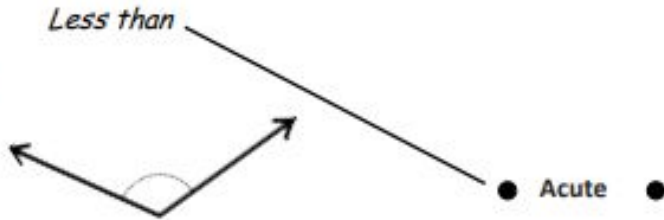
a.



b.



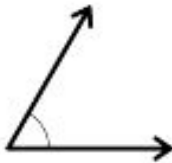
c.



d.

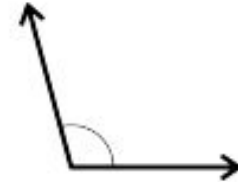


e.

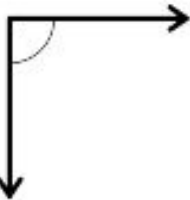


● Right ●

f.



g.



● Obtuse ●

h.



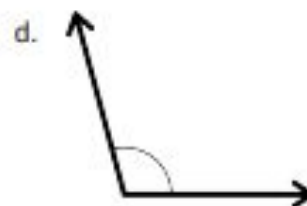
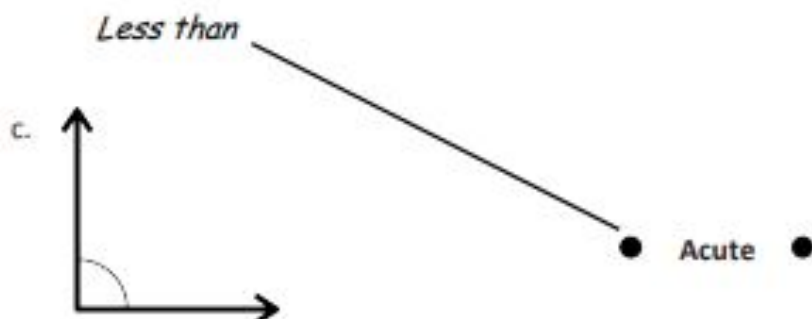
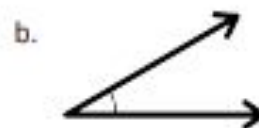
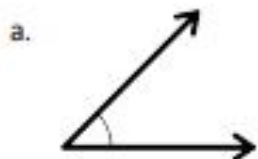
i.



j.



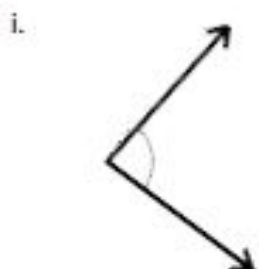
# You Try!



● Right ●



● Obtuse ●



Construct each of the following using a straightedge and the right angle template that you created. Explain the characteristics of each by comparing the angle to a right angle. Use the words *greater than*, *less than*, or *equal to* in your explanations.

a. Acute angle

b. Right angle

c. Obtuse angle

# EXIT TICKET

Name: \_\_\_\_\_  
BCCSG

Date: \_\_\_\_\_  
Howard / Spelman

**Learning Target:** Use right angles to determine whether angles are equal to, greater than, or less than right angles. Draw right, obtuse, and acute angles.

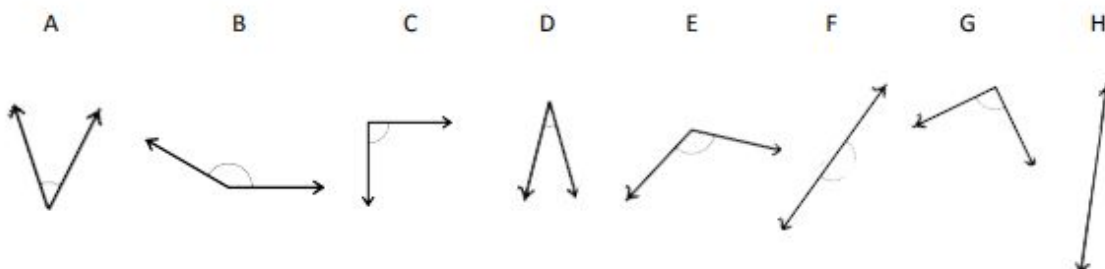
**Standards:** 4.NBT.4 4.G.1

**Directions:** Answer the questions below. Make sure you show work for every question. Record your answer on Google Classroom

1. Fill in the blanks to make true statements using one of the following words: *acute, obtuse, right, straight*.

- In class, we made a \_\_\_\_\_ angle when we folded paper twice.
- An \_\_\_\_\_ angle is smaller than a right angle.
- An \_\_\_\_\_ angle is larger than a right angle, but smaller than a straight angle.

2. Use a right angle template to identify the angles below.



- Which angles are right angles? \_\_\_\_\_
- Which angles are obtuse angles? \_\_\_\_\_
- Which angles are acute angles? \_\_\_\_\_
- Which angles are straight angles? \_\_\_\_\_

Grade: \_\_\_\_\_

# **Tuesday**

## **Date: February 2**

**Learning Target:** Identify, define, and draw perpendicular lines.

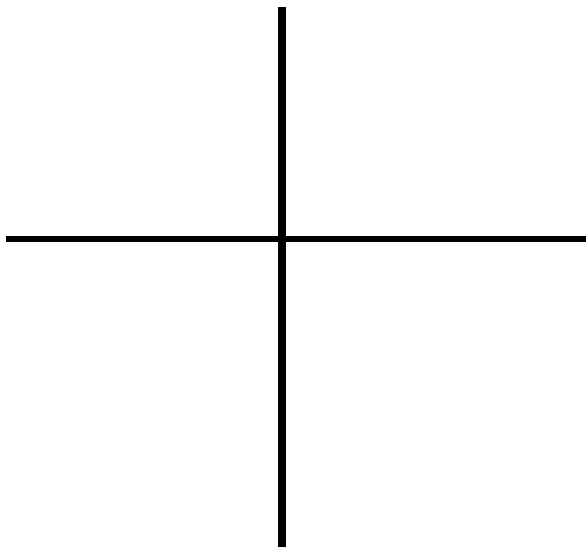
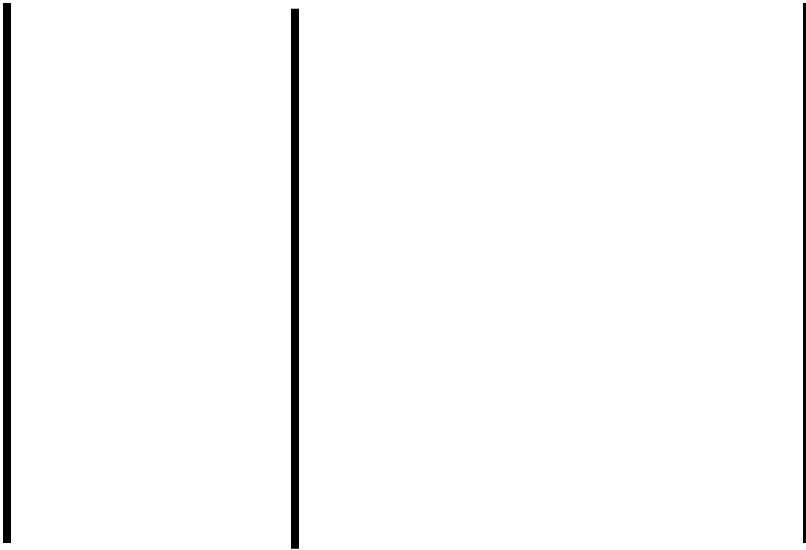
**Standards:** 4.NBT.4 4.G.1

**Do Now:**

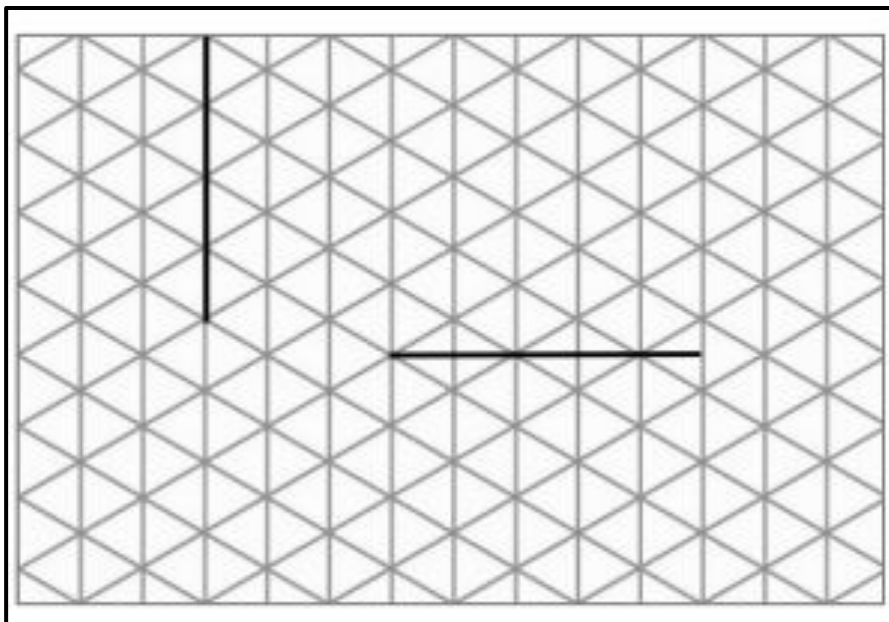
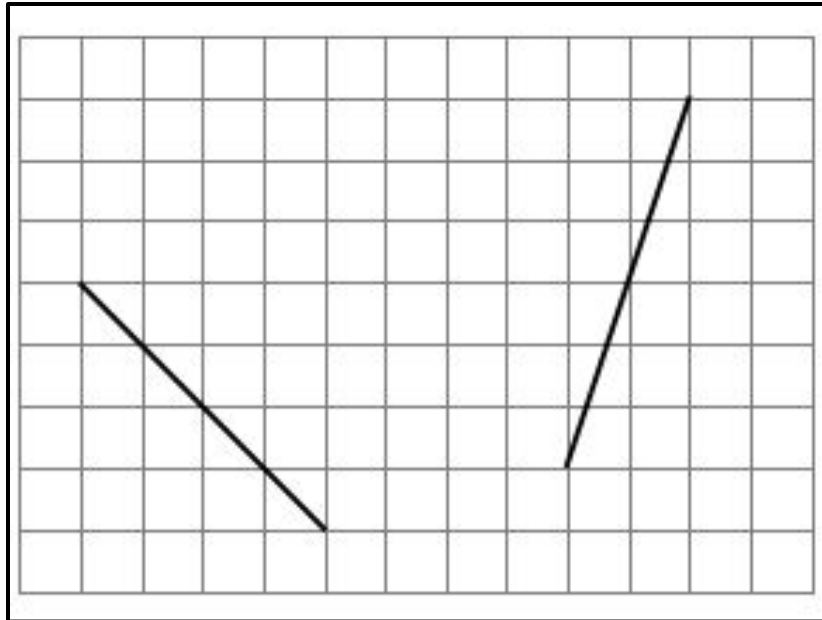
$$62 \times 7$$

$$852 \div 2$$

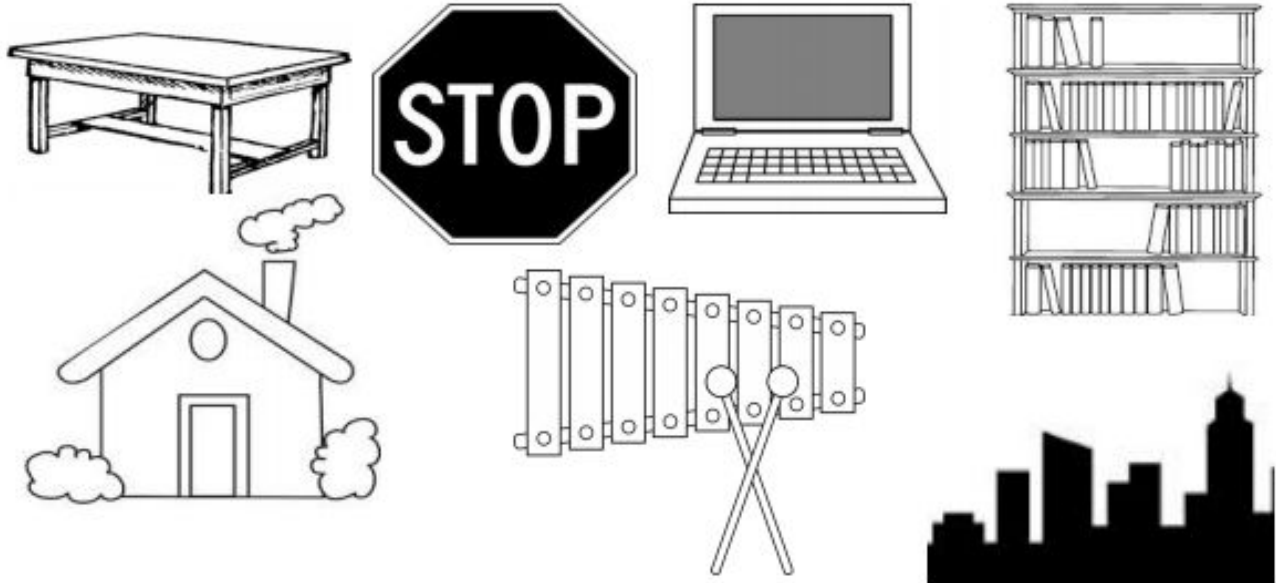
## Concept Development



**Let's Work Together!**



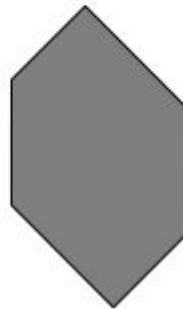
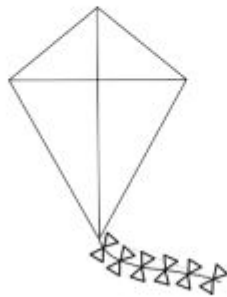
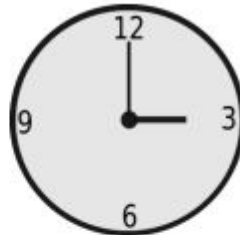
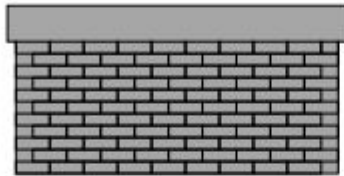
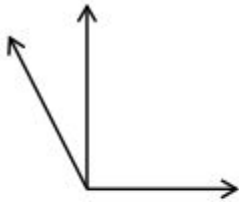
1. On each object, trace at least one pair of lines that appear to be perpendicular.



2. How do you know if two lines are perpendicular?

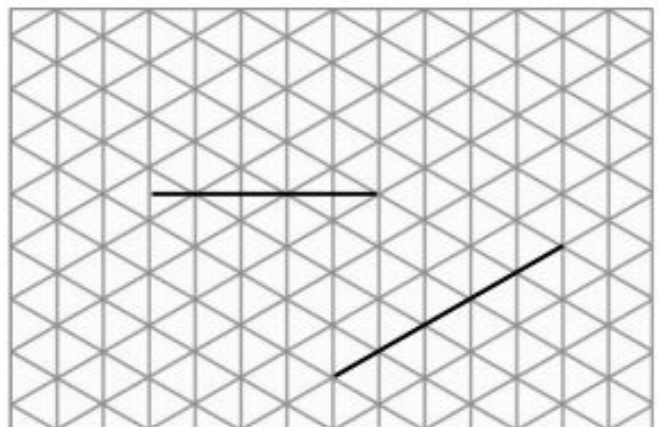
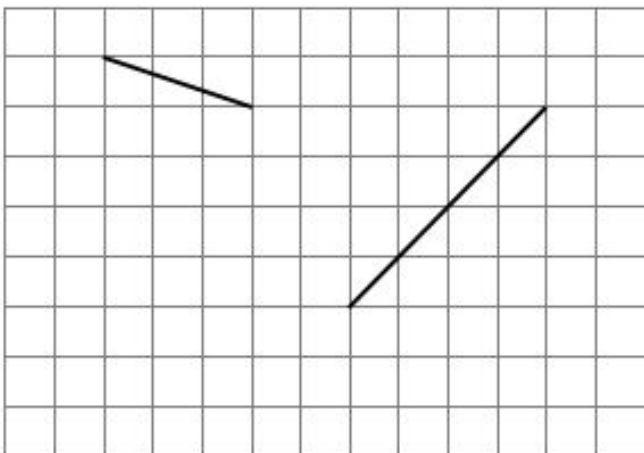
# You Try!

1. On each object, trace at least one pair of lines that appear to be perpendicular.



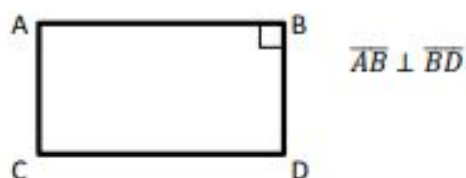
2. How do you know if two lines are perpendicular?

3. In the square and triangular grids below, use the given segments in each grid to draw a segment that is perpendicular using a straightedge.

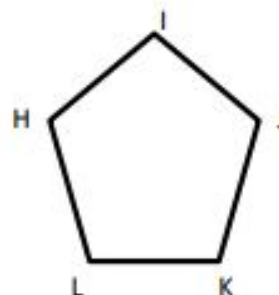


4. Use the right angle template that you created in class to determine which of the following figures have a right angle. Mark each right angle with a small square. For each right angle you find, name the corresponding pair of perpendicular sides. (Problem 4(a) has been started for you.)

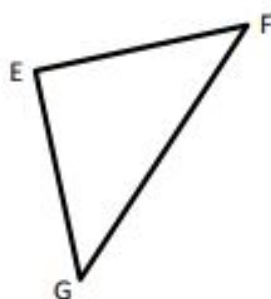
a.



b.



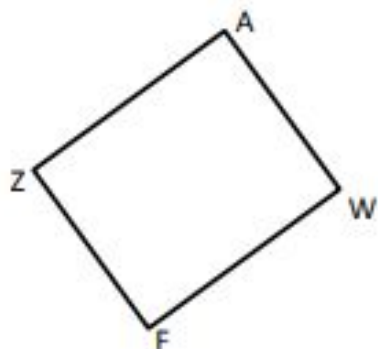
c.



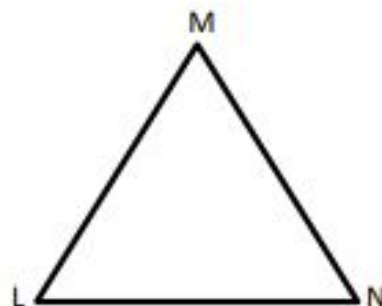
d.



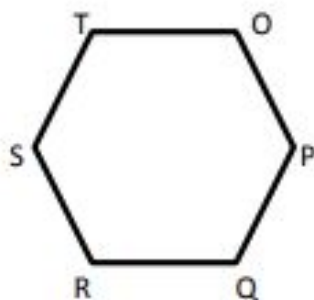
e.



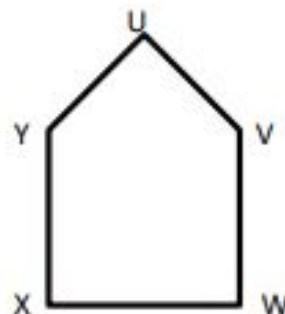
f.



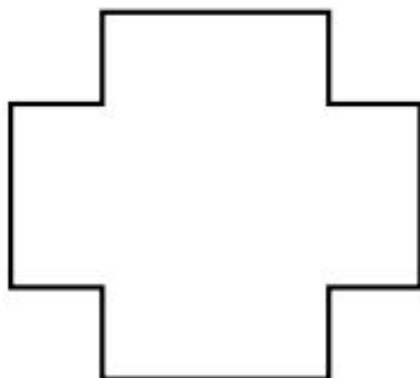
g.



h.



5. Mark each right angle on the following figure with a small square. (Note: A right angle does not have to be inside the figure.) How many pairs of perpendicular sides does this figure have?



6. True or false? Shapes that have at least one right angle also have at least one pair of perpendicular sides. Explain your thinking.

# EXIT TICKET

Name: \_\_\_\_\_  
BCCSG

Date: \_\_\_\_\_  
Howard / Spelman

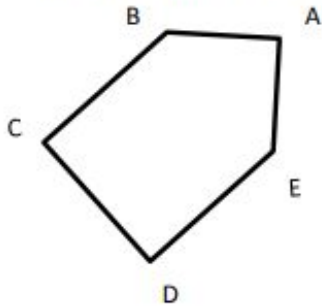
**Learning Target:** Identify, define, and draw perpendicular lines.

**Standards:** 4.NBT.4 4.G.1

**Directions:** Answer the questions below. Make sure you show work for every question. Record your answer on Google Classroom

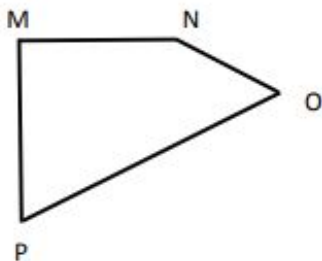
Use a right angle template to measure the angles in the following figures. Mark each right angle with a small square. Then, name all pairs of perpendicular sides.

1.



$\overline{BC} \perp$  \_\_\_\_\_

2.



$\overline{MN} \perp$  \_\_\_\_\_

Grade:

# **Wednesday**

## **Date: February 3**

**Learning Target:** Identify, define, and draw parallel lines  
**Standards:** 4.G.1

**Do Now:**

$$19 \times 27$$

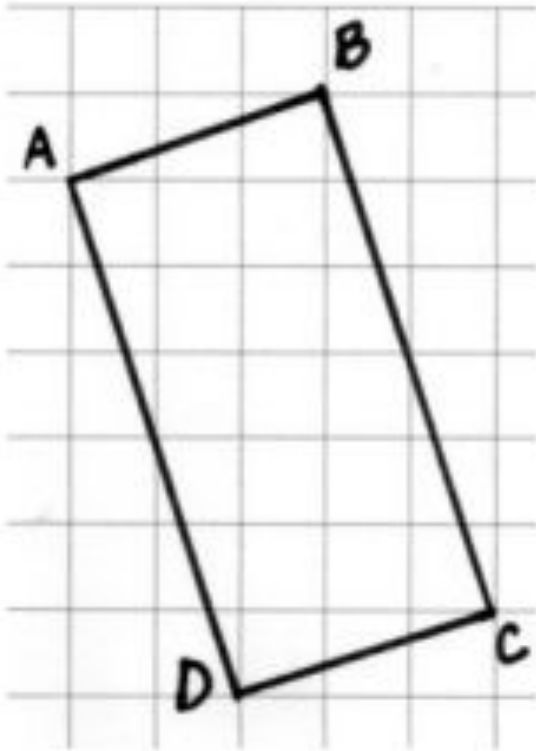
$$65 \div 4$$

## **Concept Development**

Parallel Lines with Popsicle Sticks

**Parallel Lines:**

Let's Work Together!



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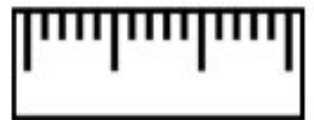
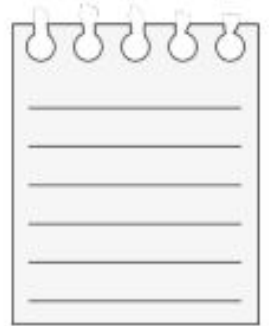
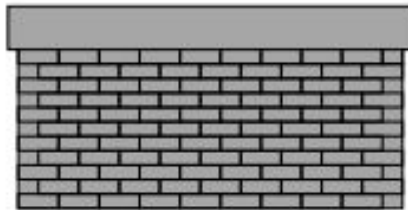
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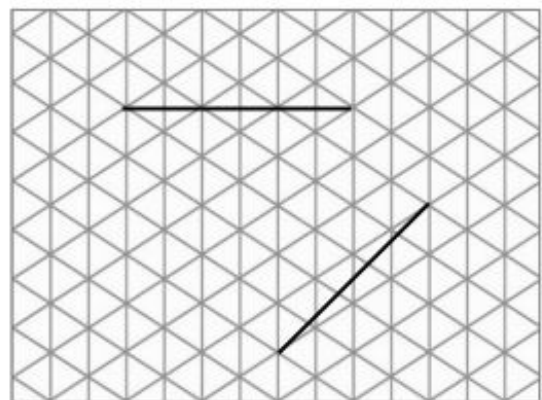
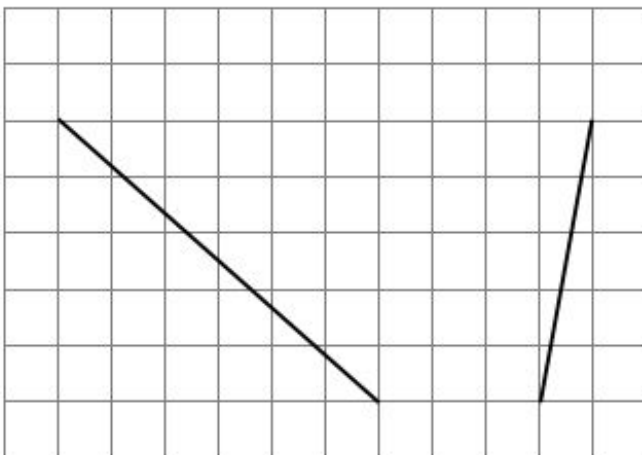
# You Try!

1. On each object, trace at least one pair of lines that appear to be parallel.



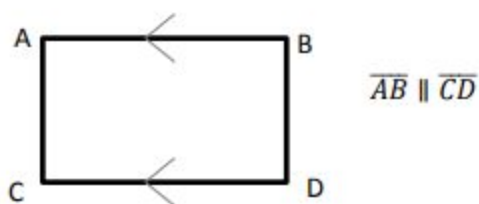
2. How do you know if two lines are parallel?

3. In the square and triangular grids below, use the given segments in each grid to draw a segment that is parallel using a straightedge.

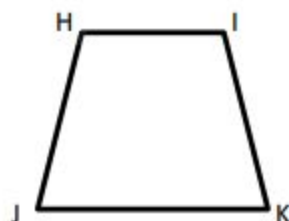


4. Determine which of the following figures have sides that are parallel by using a straightedge and the right angle template that you created. Circle the letter of the shapes that have at least one pair of parallel sides. Mark each pair of parallel sides with arrowheads, and then identify the parallel sides with a statement modeled after the one in 4(a).

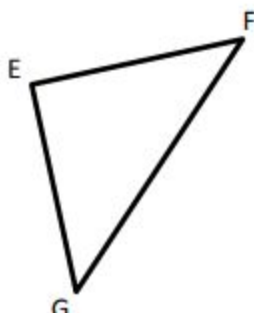
a.



b.



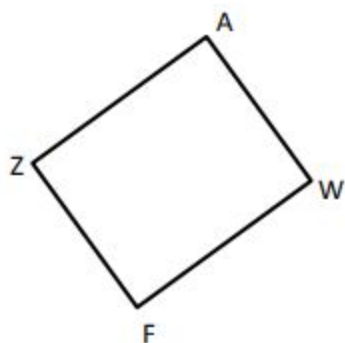
c.



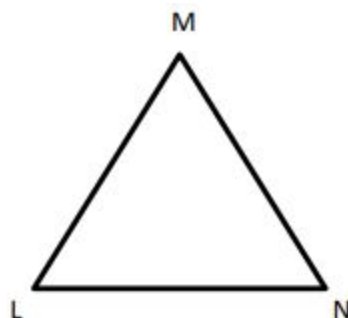
d.



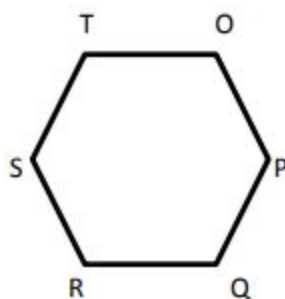
e.



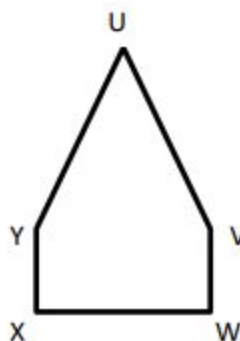
f.



g.



h.



5. True or false? A triangle cannot have sides that are parallel. Explain your thinking.

6. Explain why  $\overline{AB}$  and  $\overline{CD}$  are parallel, but  $\overline{EF}$  and  $\overline{GH}$  are not.

A ————— B

C ————— D

E ————— F

G ————— H

7. Draw a line using your straightedge. Now, use your right angle template and straightedge to construct a line parallel to the first line you drew.

# EXIT TICKET

Name: \_\_\_\_\_  
BCCSG

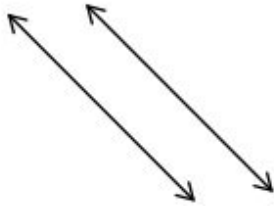
Date: \_\_\_\_\_  
Howard / Spelman

**Learning Target:** Identify, define, and draw parallel lines

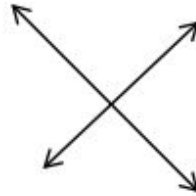
**Standards:** 4.G.1

**Directions:** Answer the questions below. Make sure you show work for every question. Record your answer on Google Classroom

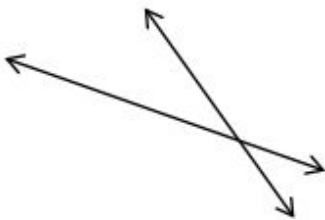
Look at the following pairs of lines. Identify if they are parallel, perpendicular, or intersecting.



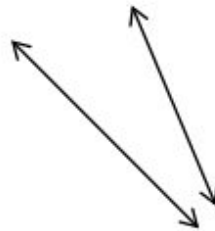
1. \_\_\_\_\_



2. \_\_\_\_\_



3. \_\_\_\_\_



4. \_\_\_\_\_

**Grade:**

# **Thursday**

## **Date: February 4**

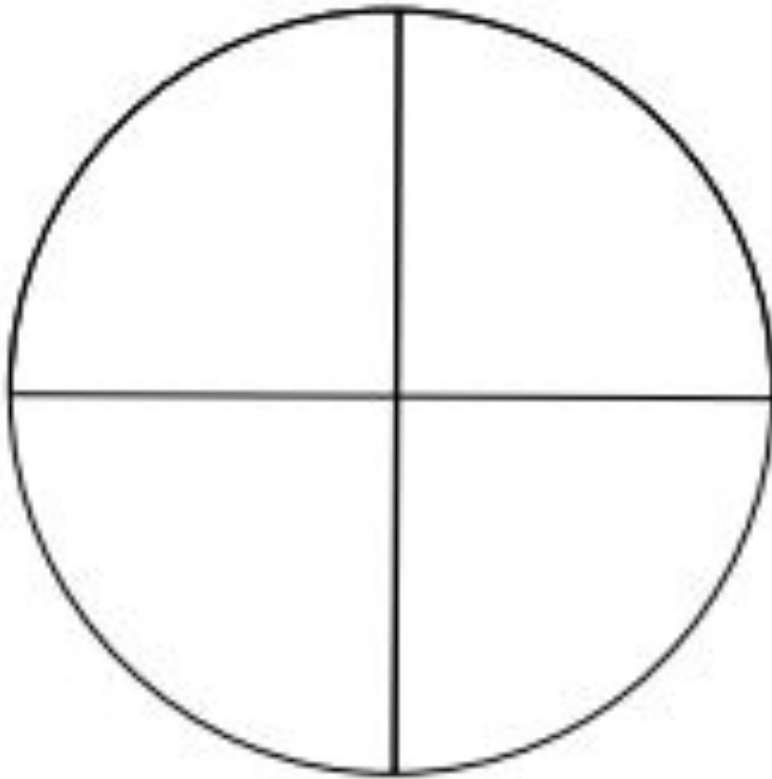
**Learning Target:** Use a circular protractor to understand a 1-degree angle as 1 /360 of a turn. Explore benchmark angles using the protractor.  
**Standards:** 4.G.1 4.NBT.6

**Do Now:**

$$94 \times 12$$

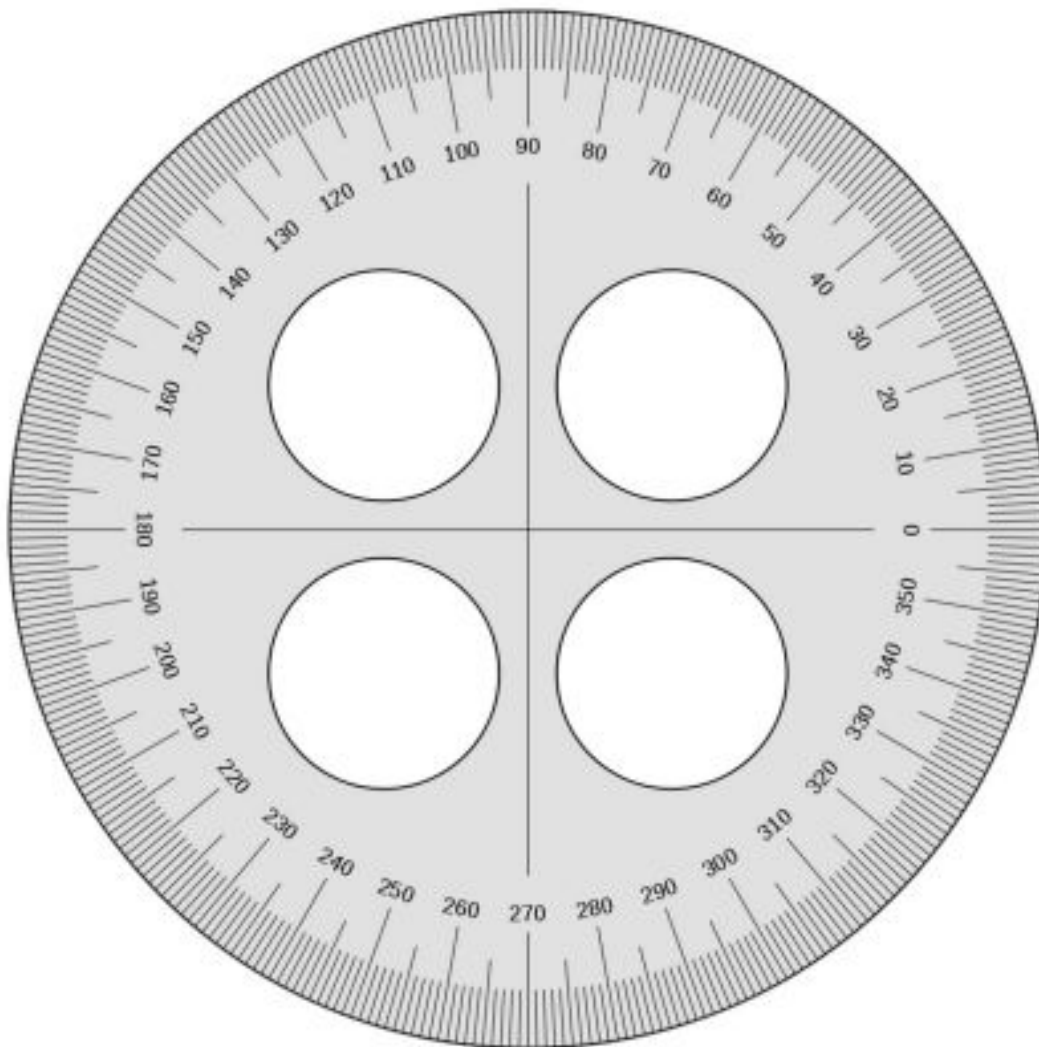
$$728 \div 4$$

## **Concept Development**



**Notes:**

## Let's Work Together



## **You Try!**

1. Make a list of the measures of the benchmark angles you drew, starting with Set A. Round each angle measure to the nearest  $5^\circ$ . Both sets have been started for you.
  - a. Set A:  $45^\circ$ ,  $90^\circ$ ,
  
  
  
  
  
  
  
  
  
  
  - b. Set B:  $30^\circ$ ,  $60^\circ$ ,
  
  
  
  
  
  
  
  
  
  
2. Circle any angle measures that appear on both lists. What do you notice about them?
  
  
  
  
  
  
  
  
  
  
3. List the angle measures from Problem 1 that are acute. Trace each angle with your finger as you say its measurement.
  
  
  
  
  
  
  
  
  
  
4. List the angle measures from Problem 1 that are obtuse. Trace each angle with your finger as you say its measurement.

5. We found out today that  $1^\circ$  is  $\frac{1}{360}$  of a whole turn. It is 1 out of 360°. That means a  $2^\circ$  angle is  $\frac{2}{360}$  of a whole turn. What fraction of a whole turn is each of the benchmark angles you listed in Problem 1?
6. How many  $45^\circ$  angles does it take to make a full turn?
7. How many  $30^\circ$  angles does it take to make a full turn?
8. If you didn't have a protractor, how could you reconstruct a quarter of it from  $0^\circ$  to  $90^\circ$ ?

## EXIT TICKET

Name: \_\_\_\_\_  
BCCSG

Date: \_\_\_\_\_  
Howard / Spelman

**Learning Target:** Use a circular protractor to understand a 1-degree angle as  $1/360$  of a turn. Explore benchmark angles using the protractor.

**Standards:** 4.G.1 4.NBT.6

**Directions:** Answer the questions below. Make sure you show work for every question. Record your answer on Google Classroom

1. How many right angles make a full turn?
2. What is the measurement of a right angle?
3. What fraction of a full turn is  $1^\circ$ ?

# **Friday**

## **Date: February 5**

**Learning Target:** Use varied protractors to distinguish angle measure from length measurement.

**Standards:** 4.G.1

**Do Now:**

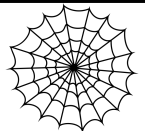
$$81 \times 39$$

$$651 \div 7$$

## **Concept Development**

### Angle Measurement versus Length Measurement

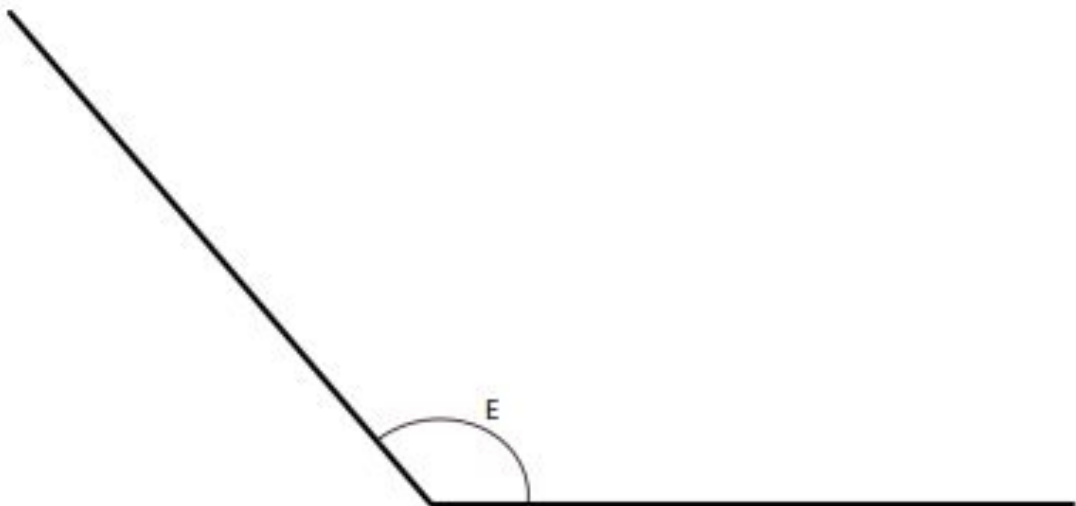
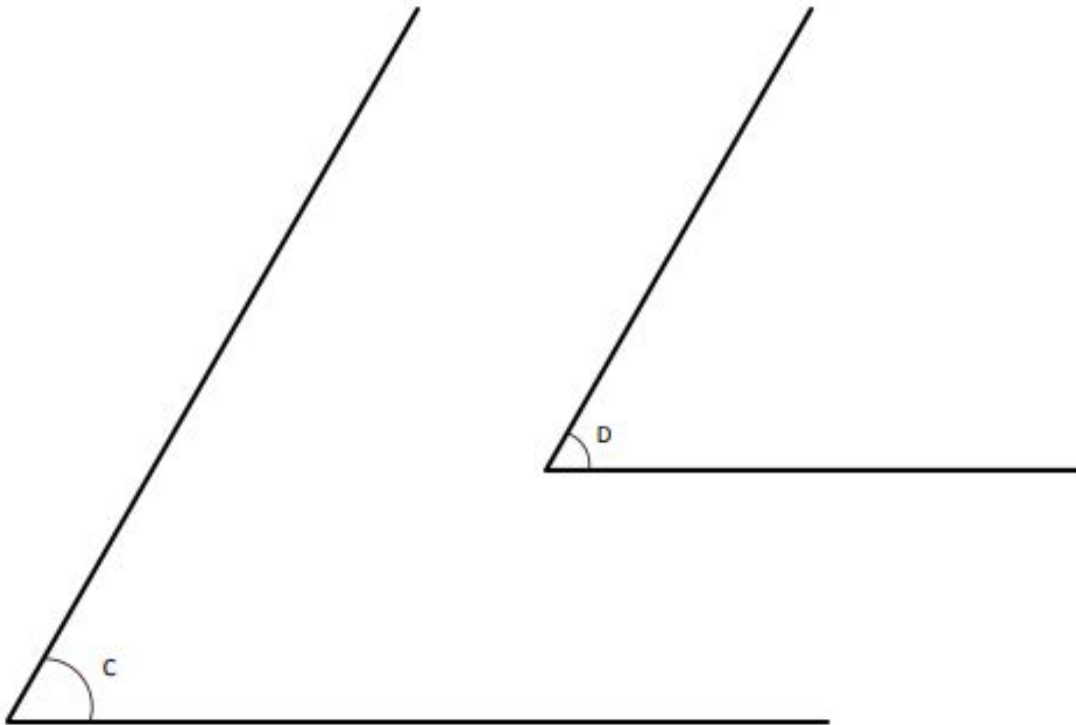
**Note Catcher:**



I wonder?

I notice:

**Let's Work Together!**



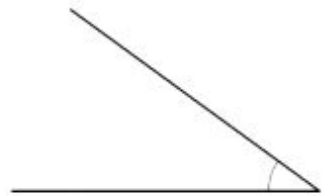
# You Try!

1. Use a protractor to measure the angles, and then record the measurements in degrees.

a.



b.



c.



d.



e.



f.



g.



h.



i.



j.

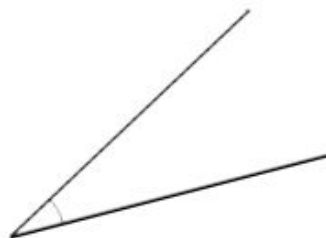


2. a. Use three different-size protractors to measure the angle. Extend the lines as needed using a straightedge.

Protractor #1: \_\_\_\_\_<sup>°</sup>

Protractor #2: \_\_\_\_\_<sup>°</sup>

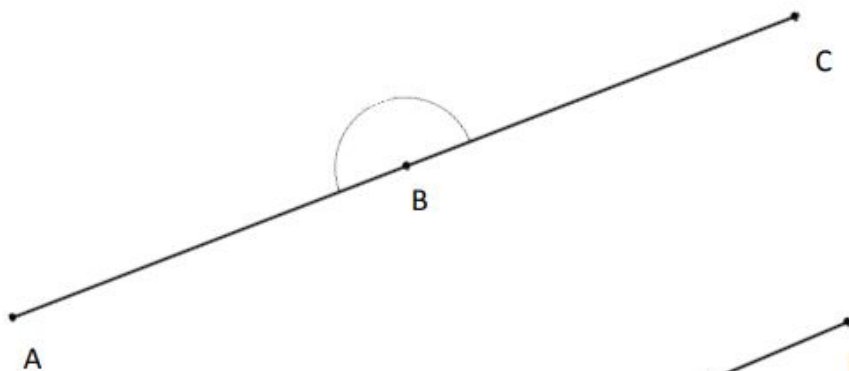
Protractor #3: \_\_\_\_\_<sup>°</sup>



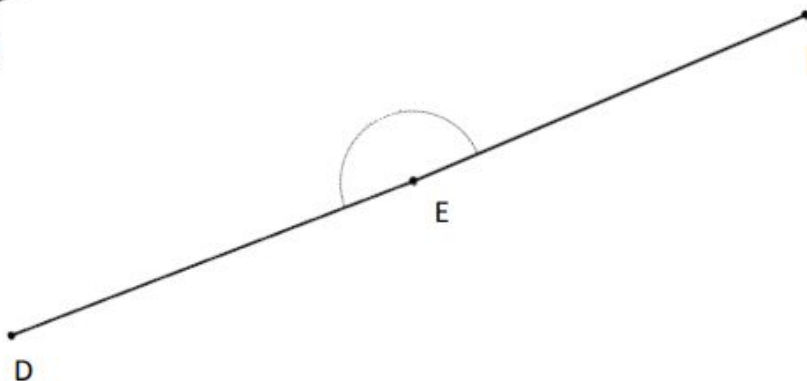
- b. What do you notice about the measurement of the above angle using each of the protractors?

3. Use a protractor to measure each angle. Extend the length of the segments as needed. When you extend the segments, does the angle measure stay the same? Explain how you know.

a.



b.



# EXIT TICKET

Name: \_\_\_\_\_  
BCCSG

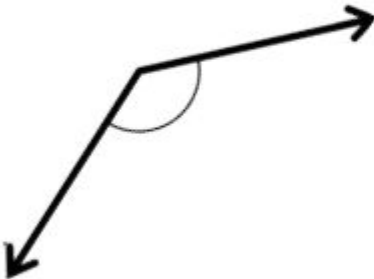
Date: \_\_\_\_\_  
Howard / Spelman

**Learning Target:** Use varied protractors to distinguish angle measure from length measurement.  
**Standards:** 4.G.1

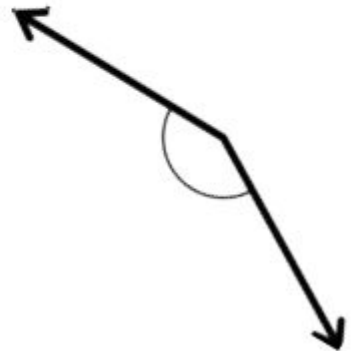
**Directions:** Answer the questions below. Make sure you show work for every question. Record your answer on Google Classroom

Use any protractor to measure the angles, and then record the measurements in degrees.

1.



2.



3.



4.

