## 4th Grade Math

## Week of: 2/22-2/26

Spelman


College ${ }_{\text {e }}$


1867
HOWARD
UNIVERSITY

## Monday

## Date: February 22

Learning Target: Use the addition of adjacent angle measures to solve problems using a symbol for the unknown angle measure. Standards: 4.MD. 7

## Do Now:

30 Which comparison statement describes the model below?


A 6 is 24 times as many as 4
B $\quad 24$ is $\mathbf{4}$ times as many as 6
C. 4 times as many as 24 is 6

D 6 times as many as 6 is 24

35 Which statement represents the number sentence below?

$$
8=4 \times 2
$$

A 4 is 8 times as many as 2
B $\quad 4$ is 2 times as many as 8
C 8 is 2 times as many as 2
D 8 is 4 times as many as 2

## Warm Up!




## Watch Me!



## Let's Work Together!


$\qquad$

$$
c^{\circ}=
$$

$O$ is the intersection of $\overline{Q R}$ and $\overline{S T}$.
$g^{\circ}=$ $\qquad$ $h^{\circ}=$ $\qquad$ $i^{\circ}=$ $\qquad$

## $\angle Q O S$ is $55^{\circ}$.



## You Try!

Write an equation, and solve for the unknown angle measurements numerically.
1.


$$
L^{\circ}+20^{\circ}=360^{\circ}
$$

$$
d^{\circ}=
$$

$\qquad$ -
2.


$$
]^{\circ}+\quad{ }^{\circ}=360^{\circ}
$$

$c^{\circ}=$ $\qquad$
3.

$\qquad$ $+{ }^{\circ}{ }^{+}$ $\qquad$ ${ }^{\circ}=$ $\qquad$

$$
e^{\circ}=
$$

$\qquad$
$\qquad$ ${ }^{\circ}+$ $\qquad$ ${ }^{\circ}=$
$\qquad$

$f^{\circ}=$ $\qquad$ -
5. $O$ is the intersection of $\overline{A B}$ and $\overline{C D}$.
$x^{\circ}=$ $\qquad$ $y^{\circ}=$ $\angle D O A$ is $160^{\circ}$, and $\angle A O C$ is $20^{\circ}$.

6. $\quad O$ is the intersection of $\overline{R S}$ and $\overline{T V}$.
$g^{\circ}=$ $\qquad$ $h^{\circ}=$ $\qquad$ $i^{\circ}=$ $\qquad$ $\angle T O S$ is $125^{\circ}$.

7. $\quad O$ is the intersection of $\overline{W X}, \overline{Y Z}$, and $\overline{U O}$.
$k^{\circ}=$ $\qquad$ $m^{\circ}=$ $\qquad$ $n^{\circ}=$ $\qquad$ $\angle X O Z$ is $36^{\circ}$.


## EXIT TICKET

| Name: | Date: |
| :--- | :--- |
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Learning Target: Use the addition of adjacent angle measures to solve problems using a symbol for the unknown angle measure. Standards: 4.MD. 7

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


1. $x^{\circ}=$
2. $y^{\circ}=$

## Tuesday

Date: February 23

Learning Target: Recognize lines of symmetry for given two-dimensional figures. Identify line-symmetric figures, and draw lines of symmetry. Standards: 4.NBT. 4 4.NBT. 7 4.MD. 7

## Do Now:

1 Jean threw a softball a distance of 9 feet. Lee threw a softball 3 times as far as Jean. Which equation can be used to determine the distance, $d$, that Lee threw the ball?

A $\quad d \times 3=9$
B $d+3=9$
C $3+9=d$
D $3 \times 9=d$

## Concept Development



b.


$$
\square
$$

## You Try!

1. Circle the figures that have a correct line of symmetry drawn.
a.

b.

c.

d.

2. Find and draw all lines of symmetry for the following figures. Write the number of lines of symmetry that you found in the blank underneath the shape.

a. $\qquad$

d. $\qquad$

g. $\qquad$

b. $\qquad$

e. $\qquad$

h. $\qquad$
c. $\qquad$

f. $\qquad$

i. $\qquad$
3. Half of each figure below has been drawn. Use the line of symmetry, represented by the dashed line, to complete each figure.
a.

c.

b.

d.

|  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

4. The figure below is a circle. How many lines of symmetry does the figure have? Explain.


## EXIT TICKET

Name:
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Date:
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Learning Target: Recognize lines of symmetry for given two-dimensional figures. Identify line-symmetric figures, and draw lines of symmetry. Standards: 4.NBT. 4 4.NBT. 7 4.MD. 7

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

1. Is the line drawn a line of symmetry? Circle your choice.


Yes
No


Yes
No


Yes
No
2. Draw as many lines of symmetry as you can find in the figure below.


## Wednesday

Date: February 24

Learning Target: Analyze and classify triangles based on side length, angle measure, or both.
Standards: 4.NBT. 6 4.G. 3

## Do Now:

Carl used some fabric to make a seat cover. Then he used 8 times as much fabric to make a tent. He used 24 yards of fabric to make the tent. Which equation can be used to determine the amount of fabric he used to make the seat cover?

A $24=8 \times ?$
B $24=8+?$
C $8 \times 24=?$
D $8+24=?$




Concept Development



## Let's Work Together!

$\sqrt{5}$

1. Classify each triangle by its side lengths and angle measurements. Circle the correct names.

|  | Classify Using <br> Side Lengths | Classify Using <br> Angle Measurements |
| :--- | :--- | :--- | :--- | :--- |
| Equilateral Isosceles Scalene | Acute Right Obtuse |  |

## You Try!

1. Classify each triangle by its side lengths and angle measurements. Circle the correct names.

|  | Classify Using <br> Side Lengths | Classify Using <br> Angle Measurements |
| :--- | :--- | :--- | :--- |
| a. | Equilateral Isosceles Scalene | Acute Right Obtuse |

2. $\triangle A B C$ has one line of symmetry as shown. What does this tell you about the measures of $\angle A$ and $\angle C$ ?

3. $\triangle D E F$ has three lines of symmetry as shown.
a. How can the lines of symmetry help you to figure out which angles are equal?
b. $\triangle D E F$ has a derimeter of 30 cm . Label the side leneths.

4. Use a ruler to connect points to form two other triangles. Use each point only once. None of the triangles may overlap. One or two points will be unused. Name and classify the three triangles below. The first one has been done for you.


| Name the Triangles Using <br> Vertices | Classify by Side Length | Classify by Angle Measurement |
| :---: | :---: | :---: |
| $\Delta F J K$ | Scalene | Obtuse |
|  |  |  |
|  |  |  |

## EXIT TICKET

Name:
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Learning Target: Analyze and classify triangles based on side length, angle measure, or both.
Standards: 4.NBT. 6 4.G. 3

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

1. The triangles below have been classified by shared attributes (side length or angle type). Use the words acute, right, obtuse, scalene, isosceles, or equilateral to label the headings to identify the way the triangles have been sorted.


2 Draw lines to identify pach triangle acrording to angle type and side length
a.
b.

c.


Acute

Obtuse

Right

Isosceles

Equilateral

Scalene

## Thursday

Date: February 25

Learning Target: Define and construct triangles from given criteria. Explore symmetry in triangles.
Standards: 4.NBT.6 4.G.3 4.G. 2

## Do Now:

Classify the Triangles by sides and angles!


## Concept Development

- Draw three points on your grid paper so that, when connected, they form a triangle.
- Use your straightedge to connect the three points to form a triangle.
- Switch papers with your partner.

Determine how the triangle your partner constructed can be classified: right, acute, obtuse, equilateral, isosceles, or scalene.

## Let's Work Together!

1. Draw triangles that fit the following classifications. Use a ruler and protractor. Label the side lengths and angles.
a. Right and isosceles
b. Right and scalene
c. Obtuse and isosceles
d. Acute and scalene
2. Draw all possible lines of symmetry in the triangles above. Explain why some of the triangles do not have lines of symmetry.

## You Try!

1. Draw triangles that fit the following classifications. Use a ruler and protractor. Label the side lengths and angles.
a. Right and isosceles
b. Obtuse and scalene
c. Acute and scalene
d. Acute and isosceles
2. Draw all possible lines of symmetry in the triangles above. Explain why some of the triangles do not have lines of symmetry.

Are the following statements true or false? Explain using pictures or words.
3. If $\triangle A B C$ is an equilateral triangle, $\overline{B C}$ must be 2 cm . True or False?

4. A triangle cannot have one obtuse angle and one right angle. True or False?
5. $\triangle E F G$ can be described as a right triangle and an isosceles triangle. True or False?

6. An equilateral triangle is isosceles. True or False?

## EXIT TICKET

| Name: | Date: |
| :--- | :--- |
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Name: Howard / Spelman

Learning Target: Define and construct triangles from given criteria. Explore symmetry in triangles.
Standards: 4.NBT.6 4.G.3 4.G. 2

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

1. Draw an obtuse isosceles triangle, and then draw any lines of symmetry if they exist.
2. Draw a right scalene triangle, and then draw any lines of symmetry if they exist.
3. Every triangle has at least $\qquad$ acute angles.

## Friday

Date: February 26

Learning Target: Classify quadrilaterals based on parallel and perpendicular lines and the presence or absence of angles of a specified size Standards: 4.NBT. 2 4.G. 2 4.MD. 5

Do Now:


## Concept Development

| Shape | Drawing | Sides | Angles |
| :--- | :--- | :--- | :--- |
| Rectangle |  |  |  |
| Square |  |  |  |
| Parallelogram |  |  |  |
| Trapezoid |  |  |  |

## Let's Work Together!

## $\square$

Construct the following figures based on the given attributes. Give a name to each figure you construct. Be as specific as possible.
a. A quadrilateral with four sides the same length and four right angles.
b. A quadrilateral with two sets of parallel sides.
d. A parallelogram with four right angles.

## You Try!

Construct the figures with the given attributes. Name the shape you created. Be as specific as possible. Use extra blank paper as needed.

1. Construct quadrilaterals with at least one set of parallel sides.
2. Construct a quadrilateral with two sets of parallel sides.
3. Construct a parallelogram with four right angles.
4. Construct a rectangle with all sides the same length.
5. Use the word bank to name each shape, being as specific as possible.
a.

b.

d.

6. Explain the attribute that makes a square a special rectangle.
7. Explain the attribute that makes a rectangle a special parallelogram.

## EXIT TICKET

| Name: <br> BCCSG | Date: <br> Howard / Spelman |
| :--- | :--- |

Name: Howard / Spelman

Classify quadrilaterals based on parallel and perpendicular lines and the presence or absence of angles of a specified size Standards: 4.NBT. 2 4.G. 2 4.MD. 5

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

1. In the space below, draw a parallelogram.
2. Explain why a rectangle is a special parallelogram.
