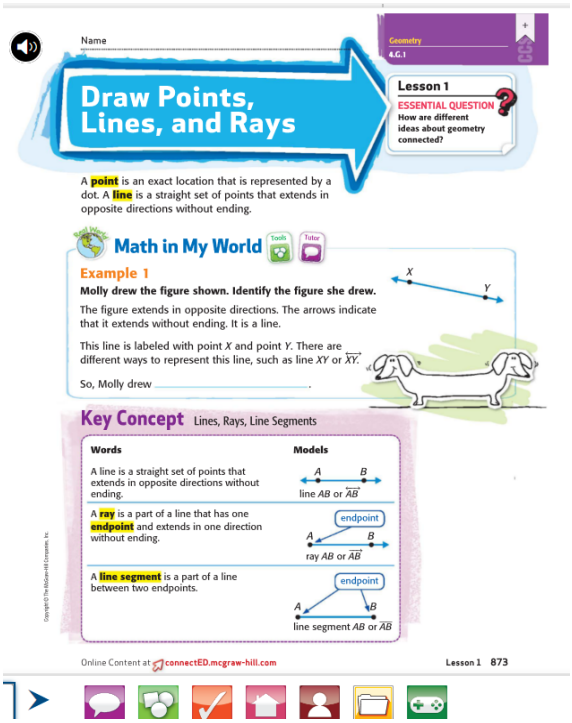
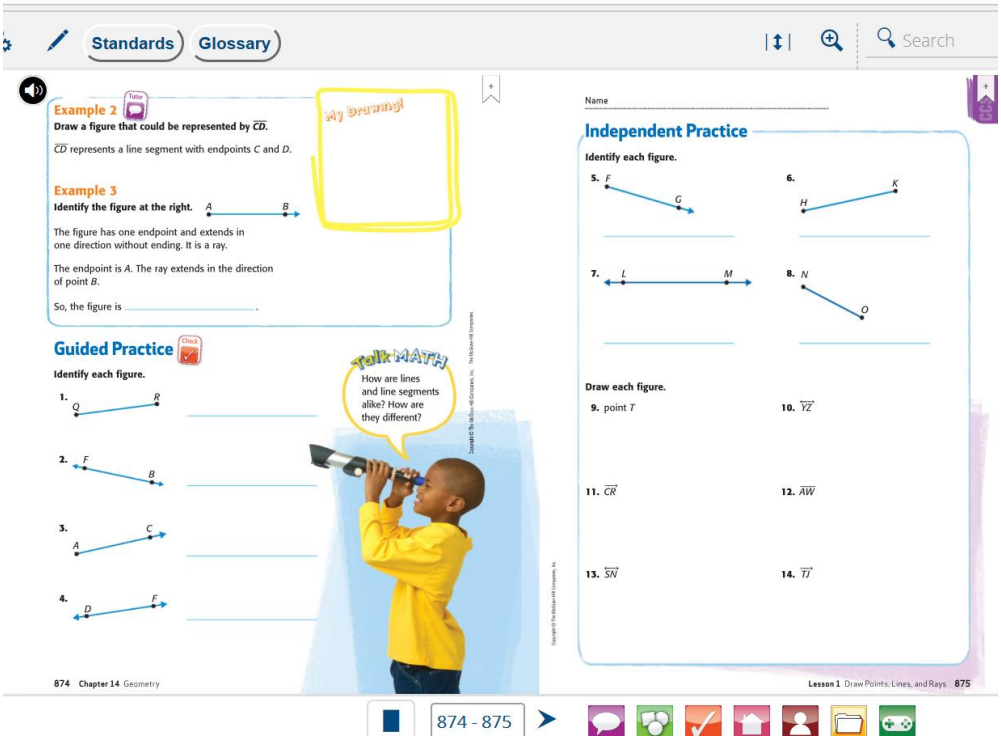
Digital Math Plans April 13-17

Standard: MGSE4.G.1 (Points, lines, angles, etc.) **You can access the math textbook (McGraw Hill app) on Clever or from the Digital Resources link on our grade level blog.

Monday (Points, lines, and rays)

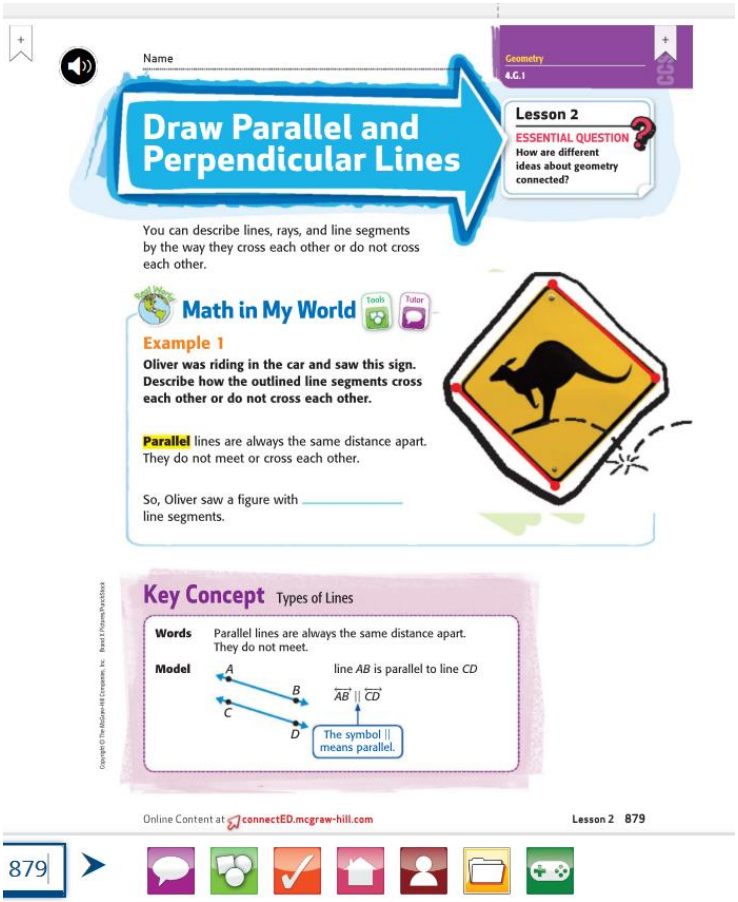
- View Brainpop video- https://www.brainpop.com/math/geometryandmeasurement/geometry/
- Read and review p. 873 of Volume 2 McGraw Hill math workbook
- Complete p. 874-875 in Volume 2 math workbook. (Screenshots below)
- Complete Freckle assignments found in backpack: Geometry Basics and 10 minutes fast practice





Tuesday (Parallel and perpendicular lines)

- Read and review workbook p. 879-880


Name

Geometry
4.G.1

Draw Parallel and Perpendicular Lines

Lesson 2
ESSENTIAL QUESTION
How are different ideas about geometry connected?

You can describe lines, rays, and line segments by the way they cross each other or do not cross each other.

Math in My World

Example 1

Oliver was riding in the car and saw this sign. Describe how the outlined line segments cross each other or do not cross each other.

Parallel lines are always the same distance apart. They do not meet or cross each other.

So, Oliver saw a figure with _____ line segments.

Key Concept Types of Lines

Words Parallel lines are always the same distance apart. They do not meet.

Model line *AB* is parallel to line *CD*

$\overleftrightarrow{AB} \parallel \overleftrightarrow{CD}$

The symbol $\parallel$ means parallel.

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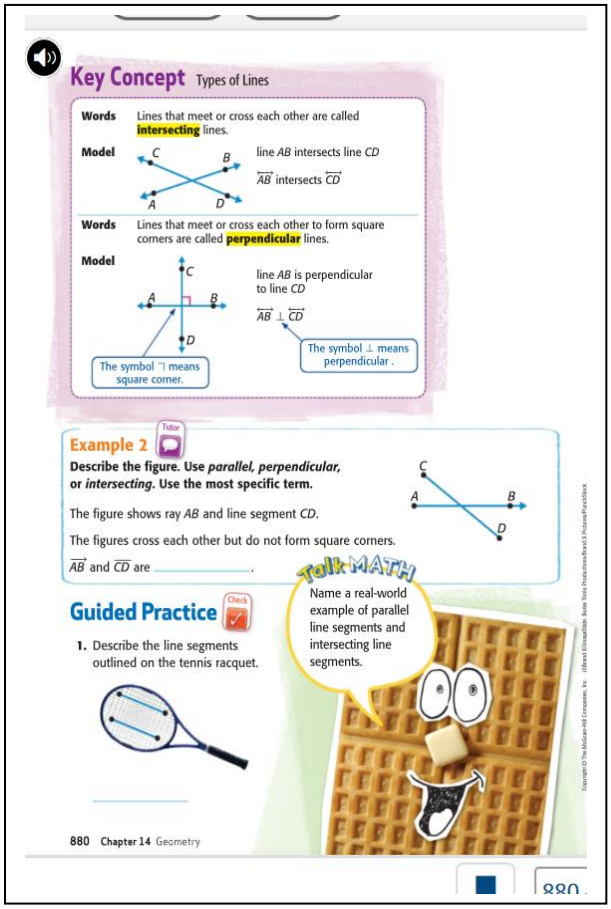
Lesson 2 879

879


Key Concept Types of Lines

Words Lines that meet or cross each other are called **intersecting** lines.

Model line *AB* intersects line *CD*

$\overleftrightarrow{AB}$ intersects $\overleftrightarrow{CD}$

Words Lines that meet or cross each other to form square corners are called **perpendicular** lines.

Model line *AB* is perpendicular to line *CD*

$\overleftrightarrow{AB} \perp \overleftrightarrow{CD}$

The symbol $\perp$ means perpendicular.

The symbol ⌝ means square corner.

Example 2

Describe the figure. Use *parallel, perpendicular, or intersecting*. Use the most specific term.

The figure shows ray *AB* and line segment *CD*.

The figures cross each other but do not form square corners.

$\overline{AB}$ and $\overline{CD}$ are _____.

Guided Practice

1. Describe the line segments outlined on the tennis racquet.

Talk MATH
Name a real-world example of parallel line segments and intersecting line segments.

880 Chapter 14 Geometry

880

- View "*test yourself, sing Karaoke, and slide show*" http://studyjams.scholastic.com/studyjams/jams/math/geometry/types-of-lines.htm
- Freckle assignments: Geometry Basics (lines) and 10 minutes of Fast Practice

Additional activities:

- p. 881-884 in math workbook
- Brainpop video- https://www.brainpop.com/math/geometryandmeasurement/parallelandperpendicularlines/
- Check My Progress p. 885-886 (Screenshots on next page)

Search

Check My Progress

Vocabulary Check

Use the word bank to complete each sentence.

endpoint **line** **line segment** **point** **ray**

1. A _____ is part of a line between two endpoints.
2. A _____ is a part of a line that has one _____ and extends in one direction without ending.
3. A _____ is a straight set of points that extends in opposite directions without ending.
4. A _____ is an exact location that is represented by a dot.

Match each vocabulary word to its definition.

5. **intersecting** • lines that meet or cross each other to form square corners
6. **parallel** • lines that meet or cross each other, but do not necessarily form square corners
7. **perpendicular** • lines that are always the same distance apart and do not meet

Concept Check

Circle the correct description of each figure.

8.

line
line segment
ray

9.

line
line segment
ray

10.

line
line segment
ray

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Problem Solving

11. Identify the lines outlined on the pair of scissors as parallel, perpendicular, or intersecting. Choose the most specific term.

12. Sandy is driving on Broadway Avenue. Which street appears to be perpendicular to Broadway Avenue?

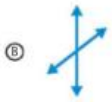
13. Nathan practiced his handwriting by writing the alphabet capital letters. He stopped at the first letter that contains line segments. At which letter did Nathan stop writing?

Test Practice

14. Which figure shows parallel lines?

Ⓐ

Ⓒ

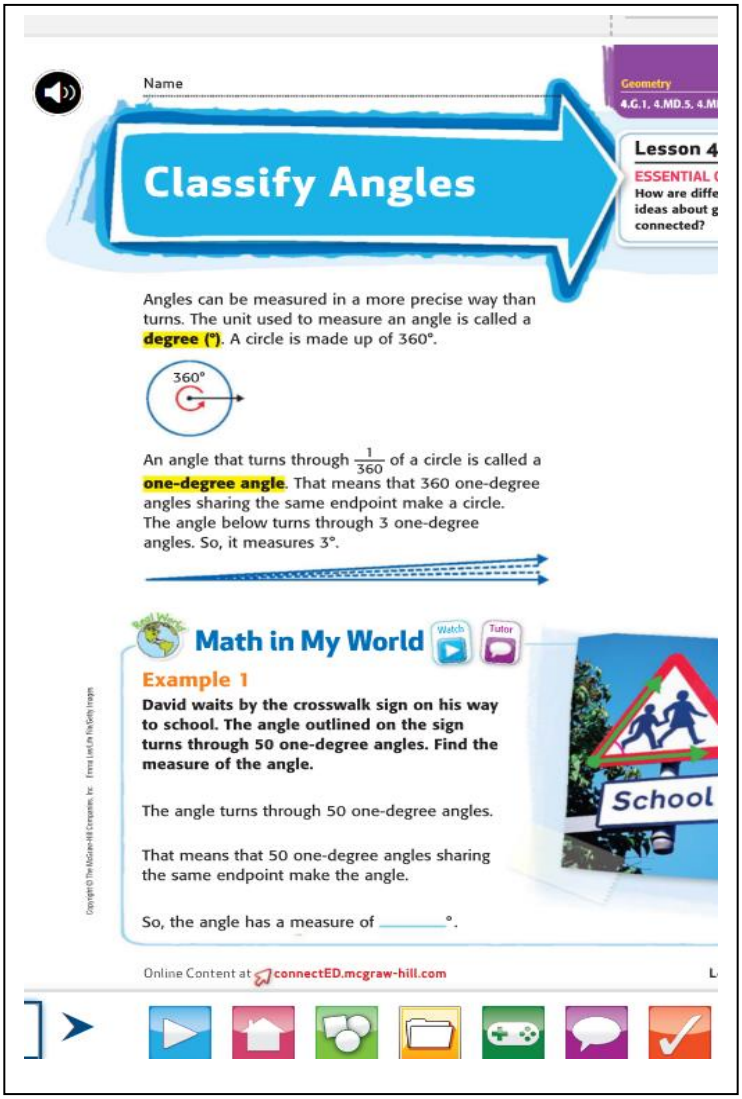
Ⓑ 

Ⓓ

Wednesday-Thursday (classifying and drawing angles)

- ***For Wednesday and Thursday lesson**, students will use their knowledge of lines and angles to plan and establish a medieval city.
  After traveling back to the year 1510, students learn all about the new chartered city, Devonshire, a bustling hub for traders, craftsmen, and artists. Students use their knowledge of lines and angles to create a city map for Devonshire. With a completed city map, students help create a new tiltyard for jousting within the city walls. Every city during the Middle Ages needs a heraldic flag, and students design their own with the contest requirements in mind.

- View this video to identify the three types of angles (right, acute, obtuse)- http://studyjams.scholastic.com/studyjams/jams/math/geometry/classify-angles.htm
- Use screenshots (see below) from the math workbook to assist with identifying angles


Name

Geometry
4.G.1, 4.MD.5, 4.M

Lesson 4
ESSENTIAL
How are diffe
ideas about g
connected?

Classify Angles

Angles can be measured in a more precise way than turns. The unit used to measure an angle is called a **degree (°)**. A circle is made up of 360°.

360°

An angle that turns through $\frac{1}{360}$ of a circle is called a **one-degree angle**. That means that 360 one-degree angles sharing the same endpoint make a circle. The angle below turns through 3 one-degree angles. So, it measures 3°.

Math in My World

Watch Tutor

Example 1

David waits by the crosswalk sign on his way to school. The angle outlined on the sign turns through 50 one-degree angles. Find the measure of the angle.

The angle turns through 50 one-degree angles.

That means that 50 one-degree angles sharing the same endpoint make the angle.

So, the angle has a measure of _____°.

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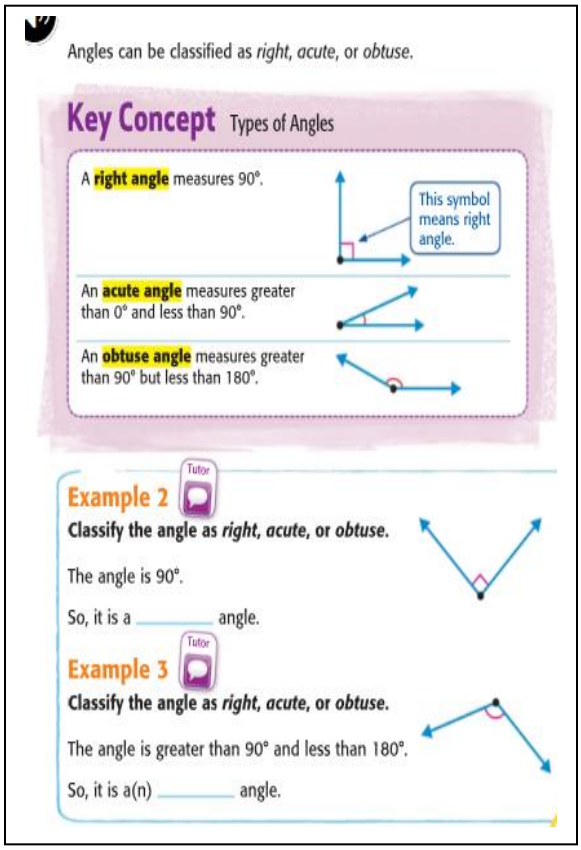

Angles can be classified as *right*, *acute*, or *obtuse*.

Key Concept Types of Angles

A **right angle** measures 90°.

This symbol means right angle.

An **acute angle** measures greater than 0° and less than 90°.

An **obtuse angle** measures greater than 90° but less than 180°.

Tutor

Example 2

Classify the angle as *right*, *acute*, or *obtuse*.

The angle is 90°.

So, it is a _____ angle.

Tutor

Example 3

Classify the angle as *right*, *acute*, or *obtuse*.

The angle is greater than 90° and less than 180°.

So, it is a(n) _____ angle.

Wednesday

Freckle Assignment:

- Please watch "*Life in a Medieval City- Day 1*" found in your backpack on Freckle and complete the graphic organizer below. **Objective of day 1:** Students will be able to identify and describe points, lines, line segments, rays and angles.

Name: _____ **Date:** _____

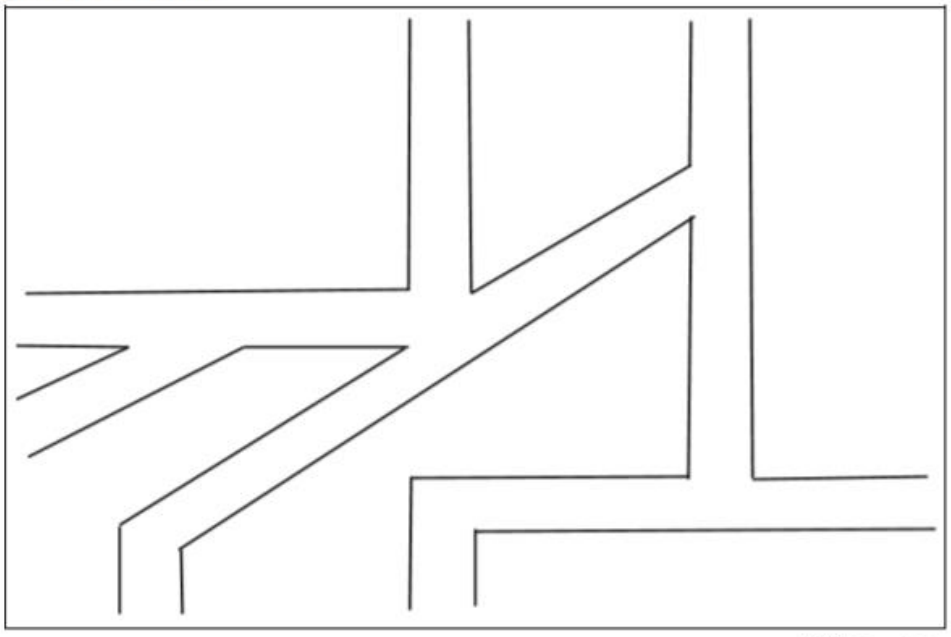
Day 1 - Students will be able to identify and describe points, lines, line segments, rays and angles.

Key Information:

- The market square is in the northwest part of the city.
- Yorkshire Street and Abbey Street are perpendicular to one another and line the market square.
- Charleston Street runs into Yorkshire Street at an acute angle.
- Abbey Street and Bookbinder Street run parallel to one another, north to south.
- Bookbinder Street ends where it meets Stonegate Street at a perpendicular intersection.
- Stonegate turns into Hexham at a right angle, and the city gate is located at the end of Hexham Street.
- Bishop Street runs diagonally across the city and turns into Wedgemoore Street at an obtuse angle.

Developing the Question: What are we trying to answer?

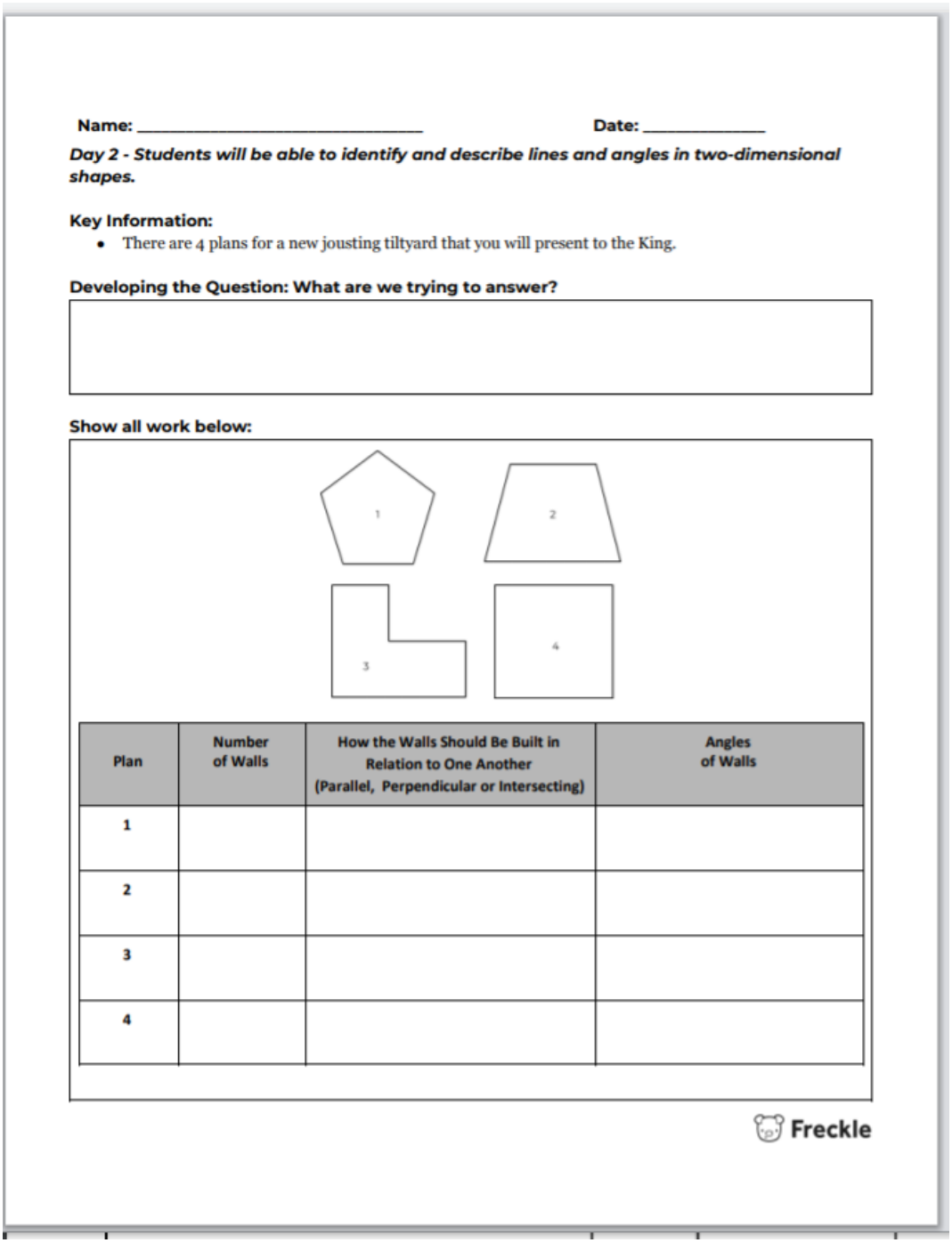
Show all work below:



Freckle

Thursday

- Freckle assignment: Please watch "*Life in a Medieval City- Day 2*" found in your backpack and complete the graphic organizer below. **Objective of day 2:** Students will be able to identify and describe lines and angles in two-dimensional shapes.



Name: _____ Date: _____

Day 2 - Students will be able to identify and describe lines and angles in two-dimensional shapes.

Key Information:

- There are 4 plans for a new jousting tiltyard that you will present to the King.

Developing the Question: What are we trying to answer?

Show all work below:

Plan	Number of Walls	How the Walls Should Be Built in Relation to One Another (Parallel, Perpendicular or Intersecting)	Angles of Walls
1			
2			
3			
4			

Freckle

- Freckle Assignment: Please watch "Life in a *Medieval City- Day 3*" found in your backpack and complete the graphic organizer below. **Objective:** Students will be able to apply their understanding of lines and angles to complete a project that resembles a real-world situation.

Name: _____ **Date:** _____

Day 3 - Students will be able to apply their understanding of lines and angles to complete a project that resembles a real world situation.

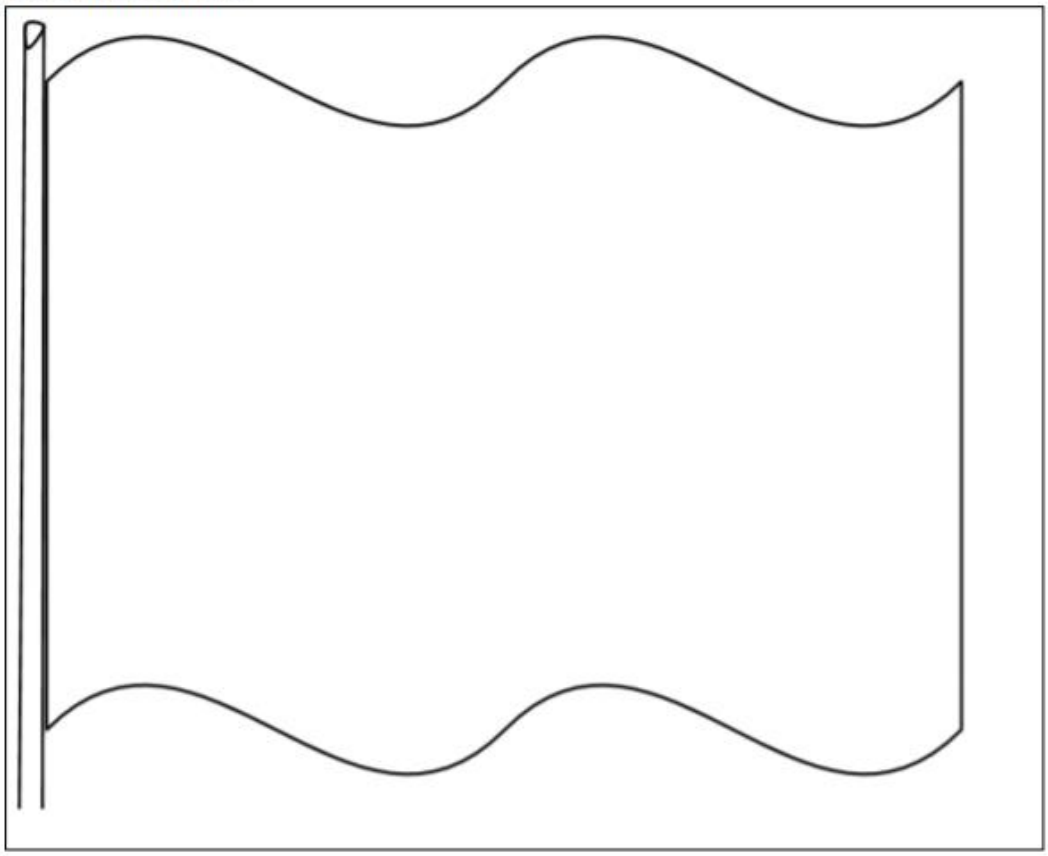
Key Information:

- The guild masters of Devonshire have issued a contest to choose the new Devonshire banner.

Project Tasks:

- Design an entry for the banner contest.
- The banner must contain a lion and the symbol of Devonshire with 3 points above its head.
- It also must contain a pair of parallel line segments and a pair of perpendicular line segments.
- There also must be two acute angles and an obtuse angle on the flag, as well as a two rays.

Show all work below:



Freckle

For additional practice with angles:

- Freckle assignment: MGSE4.MD.5a - Angle Measurement
- Additional pages in math workbook to assist with drawing angles: p. 887-890