Eureka Math

4th Grade
Module 4
Lesson 1

At the request of elementary teachers, a team of Bethel & Sumner educators met as a committee to create Eureka slideshow presentations. These presentations are not meant as a script, nor are they required to be used. Please customize as needed. Thank you to the many educators who contributed to this project!

Directions for customizing presentations are available on the next slide.

Icons

Read, Draw, Write

Learning Target

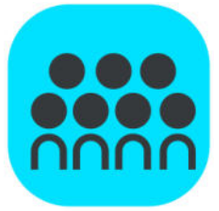
Personal White Board

Problem Set

Manipulatives Needed

Fluency

Think Pair Share



Whole Class

Individual

Partner

Small Group

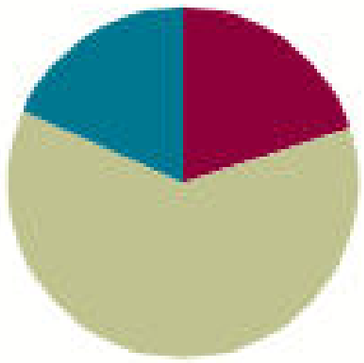
Small Group Time

Lesson 1

Objective: Identify and draw points, lines, line segments, rays, and angles. Recognize them in various contexts and familiar figures.

Suggested Lesson Structure

Fluency Practice	(12 minutes)
Concept Development	(37 minutes)
Student Debrief	(11 minutes)
Total Time	**(60 minutes)**



Identify and draw points, lines, line segments, rays, and angles. Recognize them in various contexts and familiar figures.

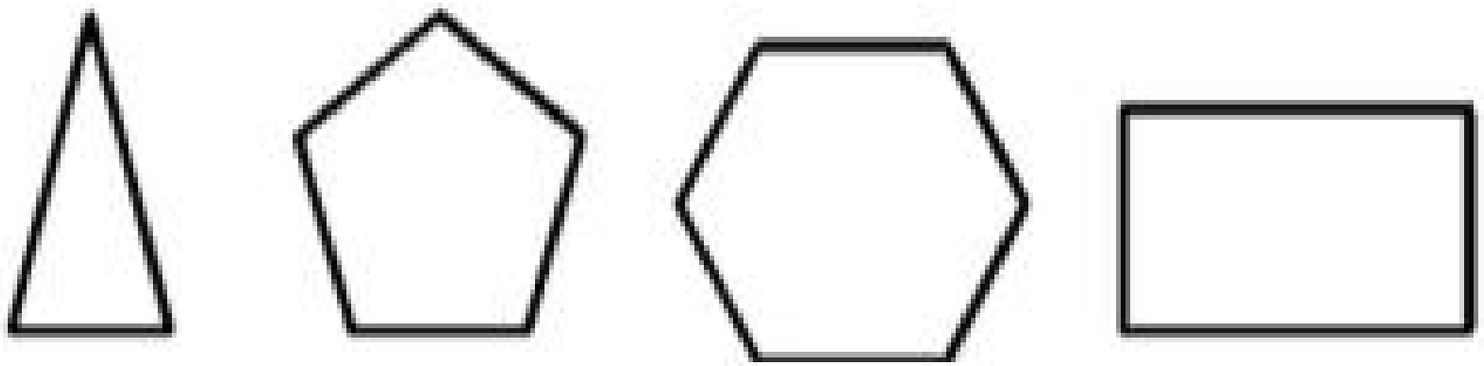
Add/Subtract

654 thousands 289 ones, write in standard form

245 thousand 164 ones write in standard form

Subtract using the standard algorithm.

Sides, angles, vertices



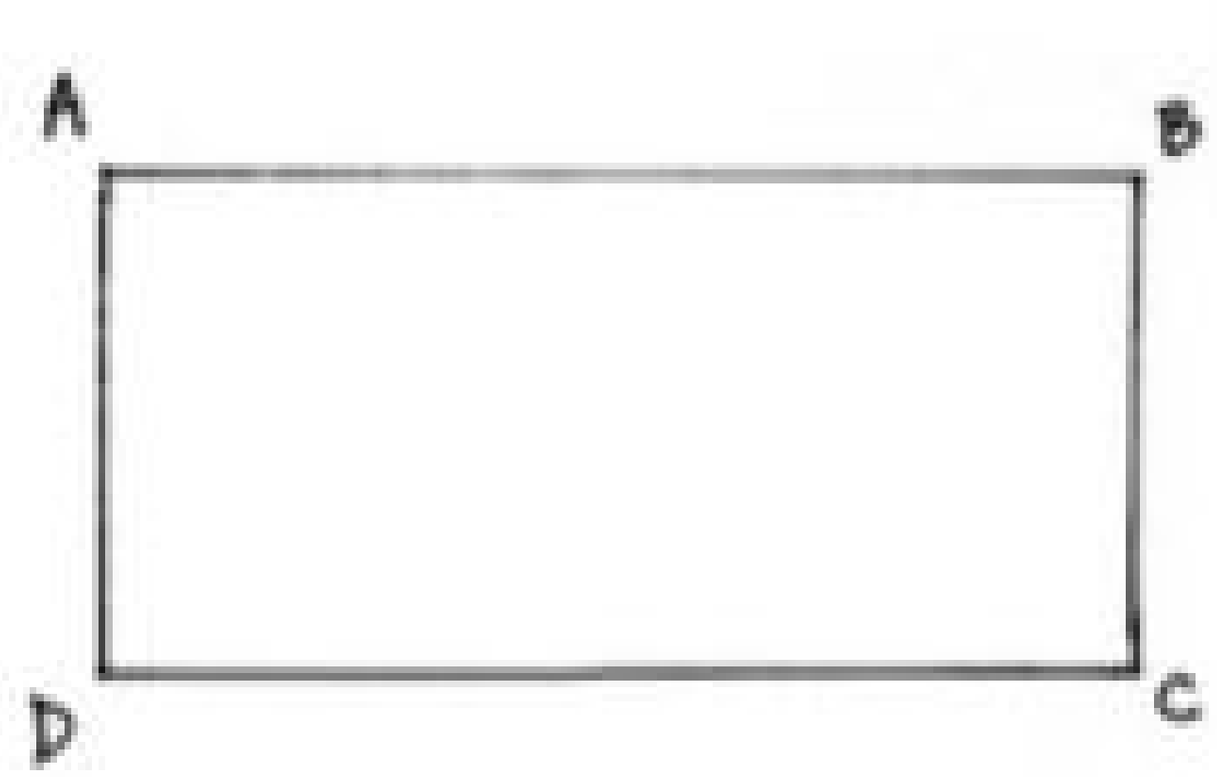
Points, Line Segments, and Lines

- Put a dot on your paper with you pencil.
- We call this “dot” a POINT. It is a specific spot.
- Now, put a POINT somewhere else on your paper
- We can give these points a name called a LABEL.
- LABEL one point A and the other point B
- Connect your points with your straightedge. DO NOT go over your points.
- When we connect to points that do not cross over the points we call them a LINE SEGMENT.
- Draw a third point on your paper and LABEL it C.
- Draw a LINE SEGMENT that connects point A and C.
- Could we extend line segment AC?
- When we extend a line segment on both ends and add arrows it becomes a LINE.
- What is different about line segment AB and line AC?

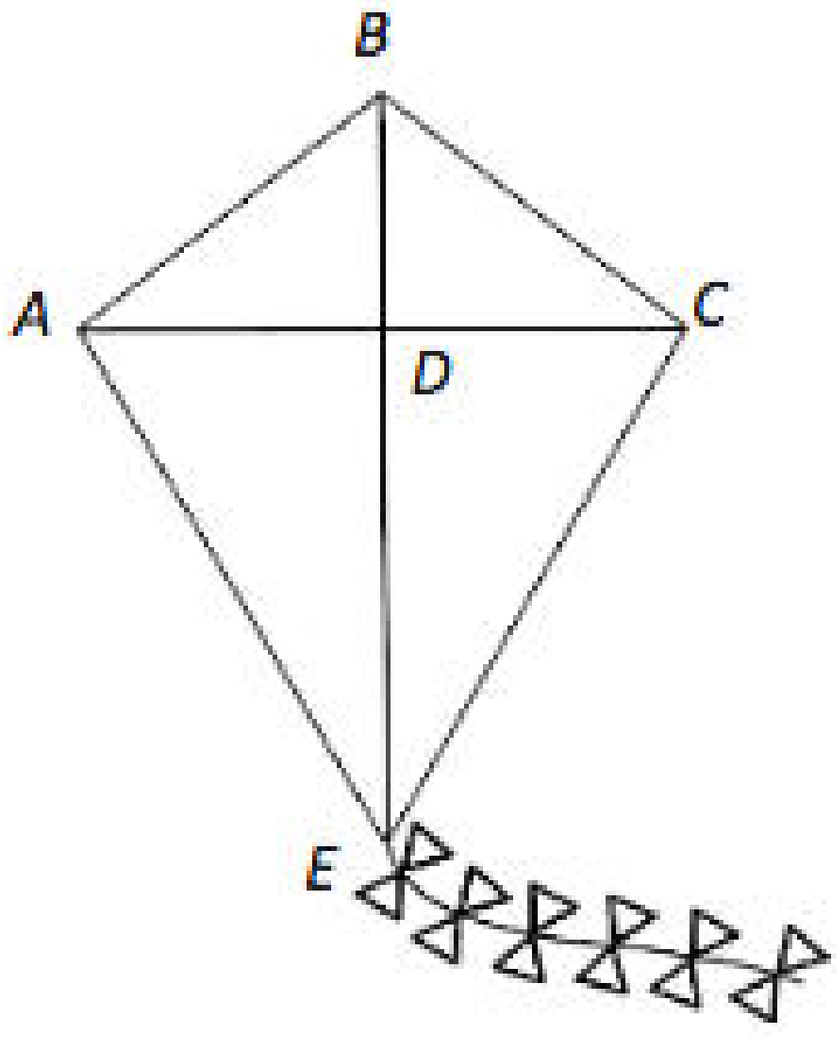
Draw, identify, and label rays/angles

- Draw point D. DO NOT place point D on segment AB or line AC.
- Connect points B and D using a straight edge. Point B is the endpoint. Extend your line past point B. Draw an arrow at the end of this line.
- We just drew something new! We call this new figure a RAY. A ray has an endpoint and is extended through the other point.
- Draw point E. Point E should not lie on ray BD, segment AB or line AC.
- Draw ray BE.
- Touch point B with your finger. Trace along the line to point D.
- Discuss the connection between ray BD and ray BE.
- When two rays connect at a COMMON POINT they create an angle.
- The angle we drew can be LABELED angle DBE or angle EBD.
- What do you notice about these two names?

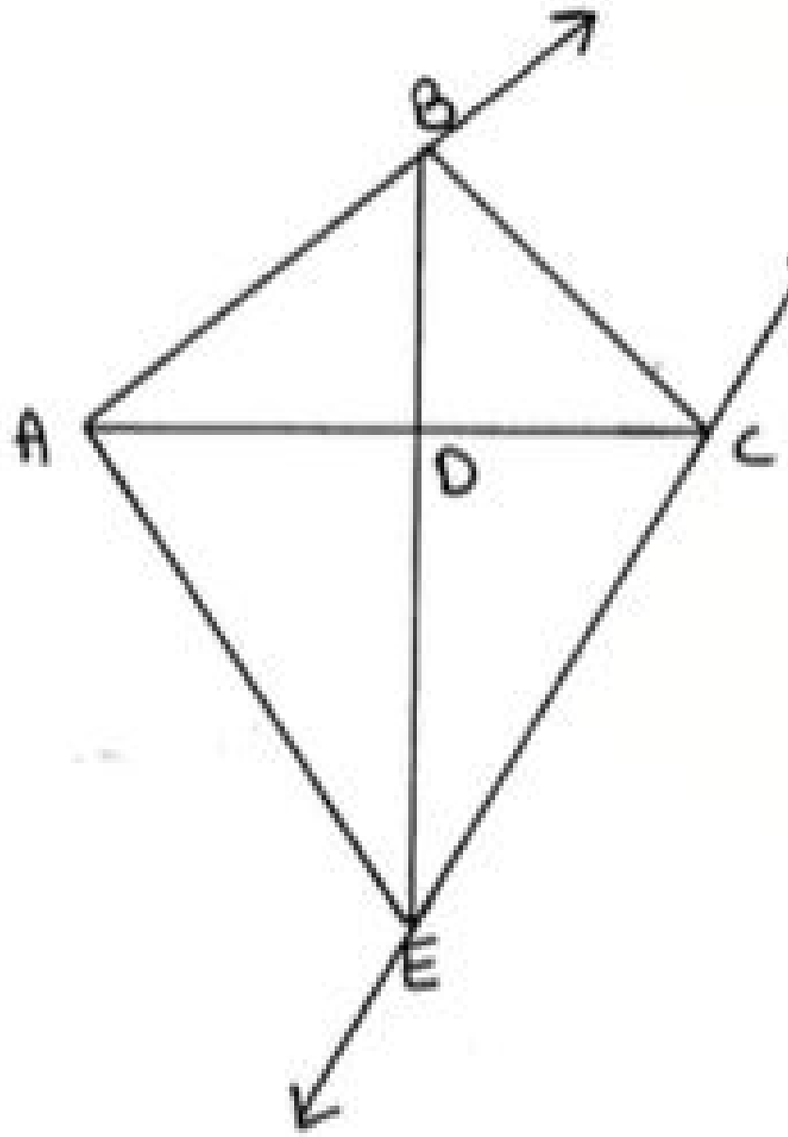
Identify: lines, segments, rays, and points

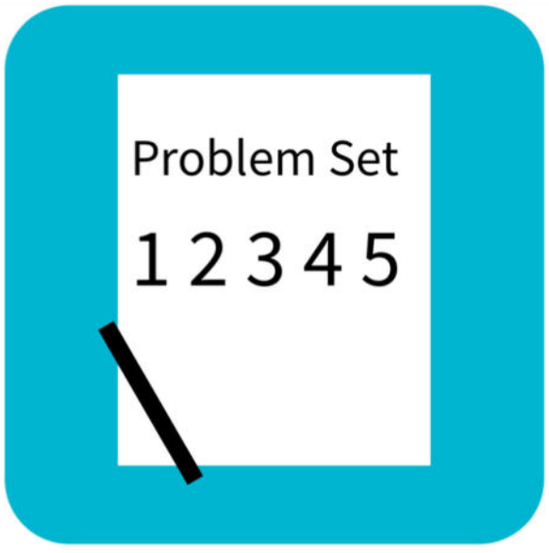


Identify: lines, segments, rays, and points



Identify: lines, segments, rays, and points





Problem Set

Name _____ Date _____

1. Use the following directions to draw a figure in the box to the right.

   a. Draw two points: A and B.

   b. Use a straightedge to draw $\overrightarrow{AB}$.

   c. Draw a new point that is not on $\overrightarrow{AB}$. Label it C.

   d. Draw $\overline{AC}$.

   e. Draw a point not on $\overrightarrow{AB}$ or $\overline{AC}$. Call it D.

   f. Construct $\overleftrightarrow{CD}$.

   g. Use the points you've already labeled to name one angle. _____

Debrief

- A **point** indicates a precise location with no size, only position. Points are infinitely small. Why do we mark them with a dot? Won't our pencil marks have width? Won't our pencil marks actually cover many points since the dots we draw have width and points do not?
- Just like a point, a **line** has no thickness. Can we draw a line that has no thickness, or will we always have to imagine that particular attribute? Why do we draw it on paper with thickness?
- How is a **line segment** different from a line?
- How many corners does a triangle have? A square? A quadrilateral? How does that relate to the number of angles a polygon has?
- How are a **ray** and a line similar? How are they different?
- How are **angles** formed? Where have you seen angles before? How does an **arc** help to identify an angle?
- Why is it hard to find real life examples of lines, points, and rays?
- How does your understanding of a number line connect to this lesson on lines?

Exit Ticket

Name _____ Date _____

1. Draw a line segment to connect the word to its picture.

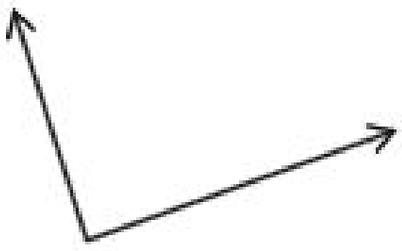
Ray

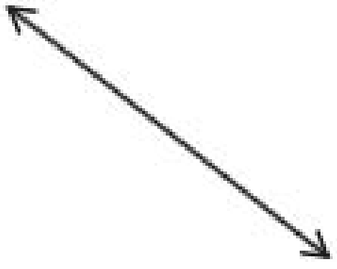
Line

Line segment

Point

Angle





2. How is a line different from a line segment?