3.G.2 Identify, describe, and draw points, lines, and line segments using appropriate tools (e.g., ruler, straightedge, and technology), and use these terms when describing two-dimensional shapes.

Reporting Category: Geometry, Measurement, and Data Analysis	**Subdomain**: N/A

3.G.2 Instructional Framework

Assessed On:

☐ Checkpoint 1 ☐ Checkpoint 2 ☐ Checkpoint 3 ☑ Summative

Content Limits:
- Do not include references to parallel or perpendicular sides.
- Do not include parallelograms.
- Do not use the term “vertex”.

Clarifications:
- N/A

Calculator Availability: Not Allowed

Expected Academic Vocabulary: point, line, line segment, endpoint, two-dimensional shape, figure

Examples of Context and Varying Difficulty Levels	
Context: Easy	Points, lines, and line segments are given as individual objects. Construction of items may include given points or partially completed figures.
Context: Medium	Points, lines, and line segments are given as part of simple or familiar figures. Construction of items may be based on one constraint/property and fully constructed by the student.
Context: Difficult	Points, lines and line segments may be shown as part of complex figures or in non-traditional orientations. Construction of items may be based on two or more constraints or properties and fully constructed by the student.

Proficiency Level Descriptors and Example Items	
Looking Back: This concept is not specifically addressed in the Indiana Academic standards prior to this grade level.	**Looking Ahead**: 4.G.2 ILEARN Item Specification
Below Proficiency: Identify or describe points, lines, and line segments in isolation.	
Match each figure to the correct description.	This is a DOK 1 item

	Has no endpoints and goes on forever in space.	Includes all the points between two endpoints.	An exact position in space.
•	☐	☐	☐
●——●	☐	☐	☐
◄——►	☐	☐	☐

Answer:

	Has no endpoints and goes on forever in space.	Includes all the points between two endpoints.	An exact position in space.
•	☐	☐	☒
●——●	☐	☒	☐
◄——►	☒	☐	☐

because students must match each of the given geometric objects to the correct property.

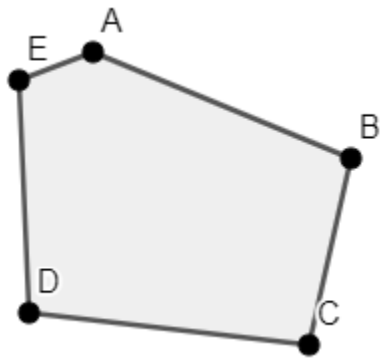
This is an easy item because the objects are given individually.

Approaching Proficiency: Identify and describe points and line segments in two-dimensional shapes. Identify and describe lines in one-dimensional figures.

Harper builds a fence around her garden. Choose the line segment that appears to be the shortest.

This is a DOK 1 item because the student must identify a geometric object within a figure.

This is a medium difficulty item because the figure is simple.

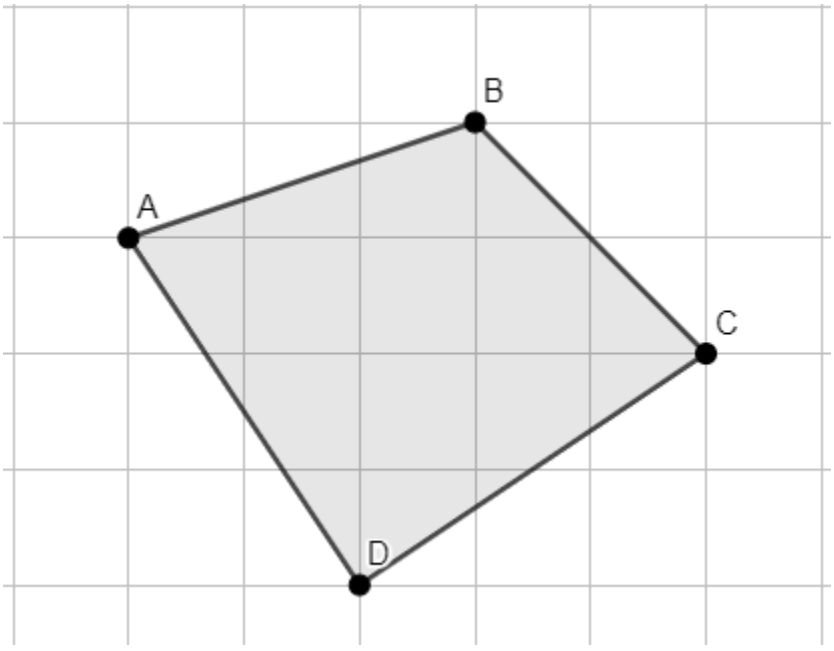


Answer: Line segment AE

At Proficiency: Construct two-dimensional shapes using points and line segments. Name each point and line segment. Identify the relationship between points, lines, and line segments in one-dimensional figures.

Part A: Use the point and line tools to construct a quadrilateral. Label the points.

Possible Answer:



Part B: Name the four line segments of the quadrilateral.

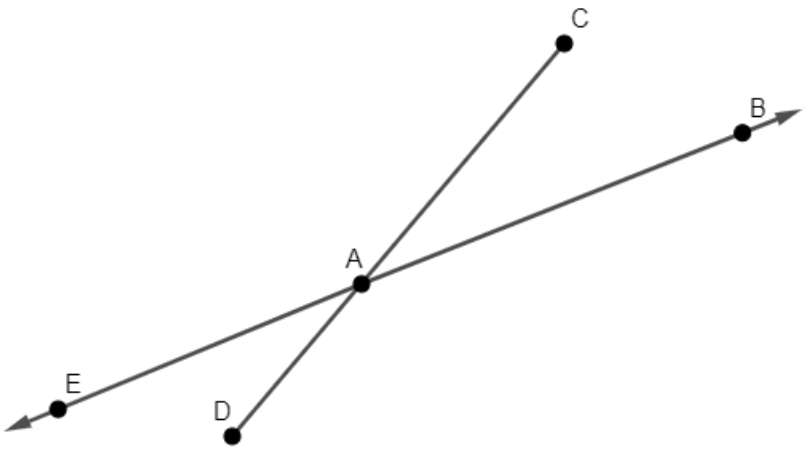
Answer: AB, BC, CD, AD

This is a DOK 2 item because students must construct a geometric figure with given properties.

This is a medium difficulty item because students must construct the shape using one constraint/property.

Which statement about the figure is true?

This is a DOK 2 item because students must



a. The figure has line segment *BE* and line *AC*.
b. The figure has point A and line segment *AD*.
c. The figure has line *CD* and line *BE*.
d. The figure has line *AB* and point *AE*.

identify points, lines, line segments, and their properties as part of a more complex figure.

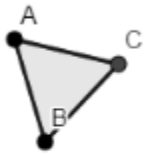
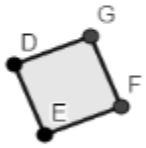
This is a medium difficulty item because the points, lines and line segments are shown as part of a complex figure.

Above Proficiency: Draw conclusions about the relationship between points, lines, and other attributes of two-dimensional shapes.

Part A: Fill in the table with the number of points and line segments that make up each figure.

This is a DOK 2 item because students must describe two-dimensional shapes based on the properties of points and line segments.

This is a medium difficulty item because the geometric objects are given as part of familiar figures.

	Number of Points	Number of Line Segments
		
		
		

Answer: 3, 3; 4, 4; 5, 5

Part B: Using the information in the chart, how many points and line segments would a 7-sided shape have?

a. 5 points, 5 line segments
b. 6 points, 6 line segments
c. 5 points, 6 line segments
d. 7 points, 7 line segments