Point and Line Segment

A. Choose the correct answer:
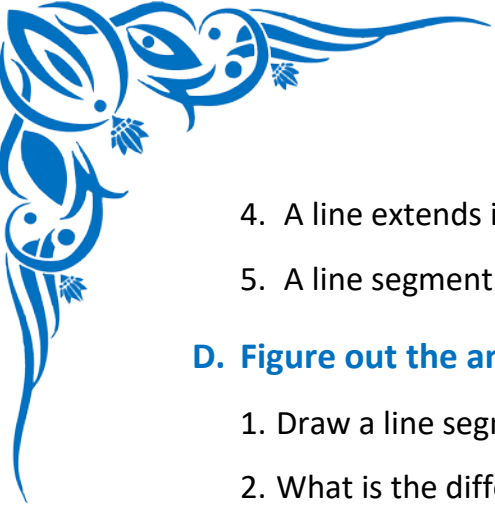
1. A point has _____.

a. Length

b. Width

c. No size

d. Depth

2. Which of the following represents a line segment?

a. A straight path with two fixed endpoints

b. A curve without endpoints

c. A broken line

d. A circle

3. How many endpoints does a line segment have?

a. One

b. Two

c. Three

d. Four

4. Which of the following is a feature of a line segment?

a. It has an endpoint at both ends

b. It goes on infinitely

c. It has no length

d. It is curved

5. A point is usually marked with a _____ on paper.

a. Circle

b. Square

c. Dot

d. Triangle

B. Write the Missing Terms to Complete the Sentences:

1. A _____ is a basic concept in geometry that has no length, width, or height.

2. A line segment is a part of a _____ with two endpoints.

3. The symbol used to represent a point is a _____.

4. A _____ line goes on infinitely in both directions.

5. A line segment is always _____ in length.

C. Mark each sentence with a True (✔) or False (✗):

1. A line segment has one endpoint. _____

2. A point has no length or width. _____

3. A line segment can be curved. _____

4. A line extends infinitely in both directions. _____

5. A line segment is always straight.   _____

D. Figure out the answers to these questions:

1. Draw a line segment and label its two endpoints.

2. What is the difference between a point and a line segment?

3. How many points are there on a line segment?

4. If a line has no endpoints, what is it called?

5. Can a line segment be longer than a line? Explain.

E. Challenge yourself with these questions:

1. How do you represent a point in a drawing?

2. If you have two points, how can you create a line segment between them?

3. Can a line segment ever be curved? Why or why not?

4. If a point is placed on the paper, what does it represent in geometry?

5. How would you explain the difference between a line and a line segment to a classmate?