

Which of these most nearly represents a flat surface?

- a. a mountain peak
- b. a baseball
- c. a pond on a calm day

c

In mathematics, a plane is a flat surface which extends indefinitely. We will use this page to represent part of a pl _____ .

plane

But we must remember that a sheet of paper is not a perfect representation of a _____ ane.

plane

The sheet of _____ has a certain thickness and it has edges.

paper

In mathematics, a _____ has no thickness and no edges.

plane

Which one of these most nearly represents part of a plane?

- a. the surface of a hill
- b. the surface of a window pane
- c. the surface of a stormy sea
- d. the surface of a rocky field
- e. the surface of a football
- f. the surface of a tin can

b

In mathematics, a plane is perfectly flat.

no

Does it have thickness? _____

no

Does it have edges? _____

In mathematics, an exact, fixed location is called a point. Such a p_____ has no length, width, or thickness. It is only an exact l_____.

point
location

We mark a point with a dot, and we speak of dots as points. But we must remember that a d_____ is not a point. The dot just represents a _____.

dot
point

These two dots represent two different _____.

points

How many points do these dots represent? _____

5

We will use capital letters to name points.

• A • B

These are points A and _____.

B

Does a mathematical point have length? _____

no

Does it have width? _____

no

A point marks a fixed lo_____.

location

Points are named with _____ letters.

capital



points

These dots represent two _____ labeled C and D.



D

We now show a straight path connecting the points C and _____.

Such a straight path is called a line segment.

line

The points C and D are called the endpoints of the _____ segment.

points

A straight path connecting two _____ is called a line segment.



segment

This line _____ connects the points Y and Z.

Z

The points Y and _____ are the endpoints of the line segment.

line

This is _____ segment OP.

segment

If we wished, we could also call it line _____ PO.

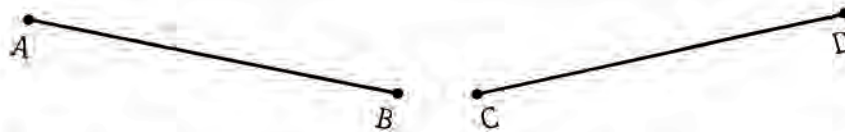


The endpoints of this line segment are labeled K and _____.

To name the line segment, we use the names of its _____.

This is line _____ KL.

Could we also call it line segment LK? _____

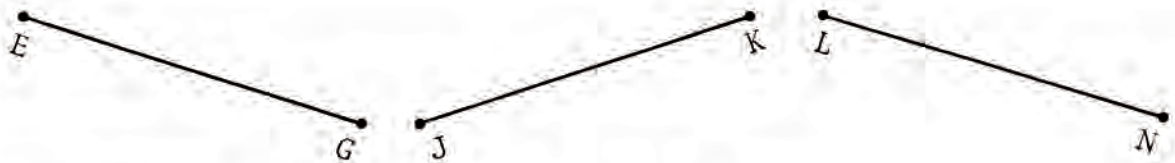


The drawings represent two _____ segments.

One line segment contains the endpoints A and _____.

The other line segment contains the _____ C and D.

The names of the line segments are AB and _____.



The drawings represent _____ line segments.

Every _____ contains two endpoints.

We use the names of its _____ to name a line segment.

The names of the line segments are EG, JK, and _____.