# Measuring Segments 

Unit 1 Lesson 3

## Measuring Segments

## Students will be able to:

Measure and compare lengths of segments using ruler

## Key Vocabulary

- Line Segment
- Distance/length
- congruent segments
- Segment bisector
- Segment partition


## Measuring Segments

A Line Segment is a line that is bound by two unique end points and does not extend indefinitely without ending (like a line).

- The line segment always has a certain length that can be measured using a ruler.
- The line segment is represented by the bold letters representing the two end points and a straight dash to show it is a line segment.



## Measuring Segments

The length of a line segment (line segment) is measured using a ruler. The standard ruler which is used to measure lengths (on a paper) in geometry is a centimetre ruler.


## Measuring Segments

To measure the length of segment using the centimetre ruler, match one end point with 0 on the centimetre scale and then match the number on the scale with the other end point of line segment. That number is the length of the line segment


## Measuring Segments

Two line segments having same lengths are said to be congruent line segments.
The symbol of congruency is two forward dashes on both lines as '/'.


The two lines are congruent

## Measuring Segments

A segment bisector is a point, line or a line segment that divides the line segment into two equal parts. A segment bisector is usually at the centre of the line segment and always includes the midpoint of the line segment.


The point $A$ is a segment bisector

## Measuring Segments

A segment partition is a point, line or a line segment that partitions the line segment in a particular ratio. If the ratio is equal, the segment partition becomes a segment bisector.


The point A divides the line segment in a $\mathbf{1 : 2}$ ratio

## Measuring Segments PROBLEM 1:

Measure the length of the line segment and draw a segment bisector on it. Use the scale given below.


## Measuring Segments

Match the end points with the scale to measure the length first.


The length of the line segment is $\mathbf{4 c m}$


The segment bisector comes at $\mathbf{2 c m}$ and is represented by point $\mathbf{C}$.

