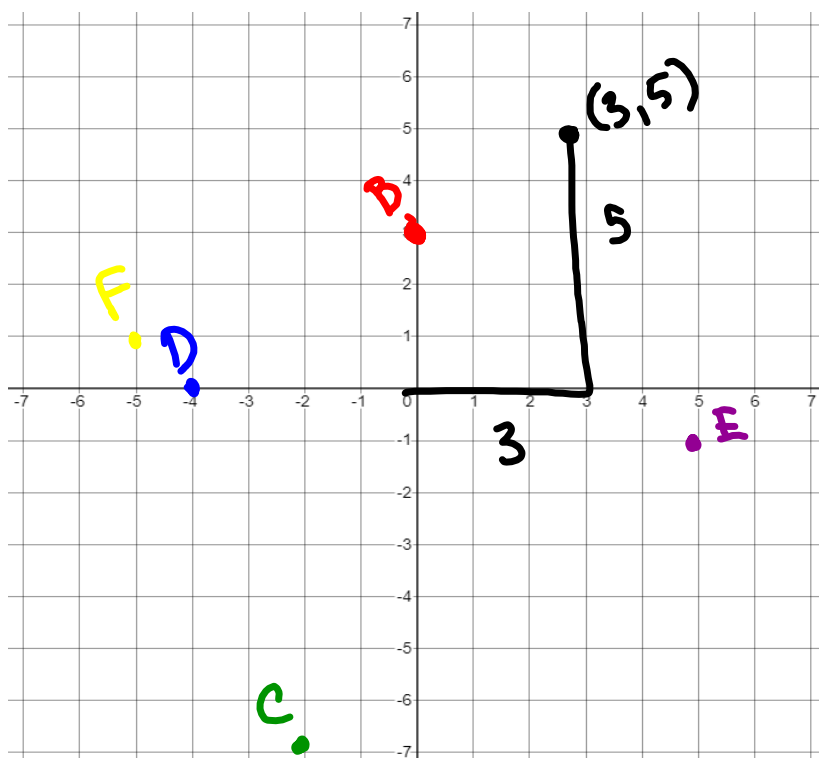


## Geometry - 1.2 Measuring and Constructing Segments

- Measure the lengths of segments
- Find the distance between two points on a segment
- Plot points on a coordinate plane and find the distance of segments created by the points

Ordered Pairs Refresher:

Plot the following points on the Coordinate plane.

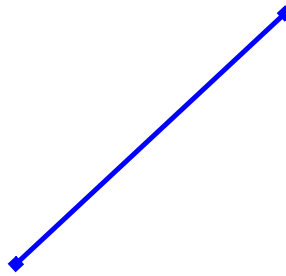
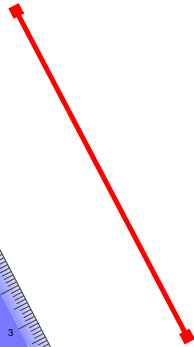
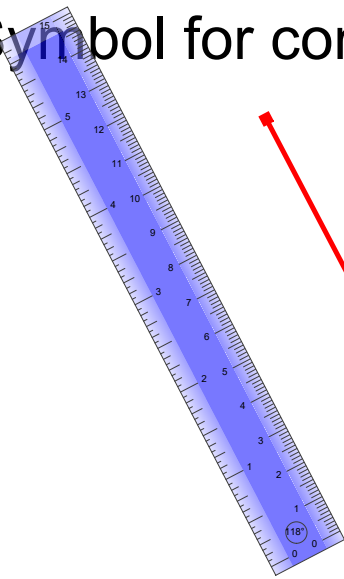


$(x, y)$	
$(3, 5)$	A
$(0, 3)$	B
$(-2, -7)$	C
$(-4, 0)$	D
$(5, -1)$	E
$(-5, 1)$	F

## Congruent Segments:

Segments are Congruent if they have the same length. **Are these two segments congruent?**

Symbol for congruent:  $\cong$



Plot the following points to form the segments indicated and determine if JK and LM are congruent.

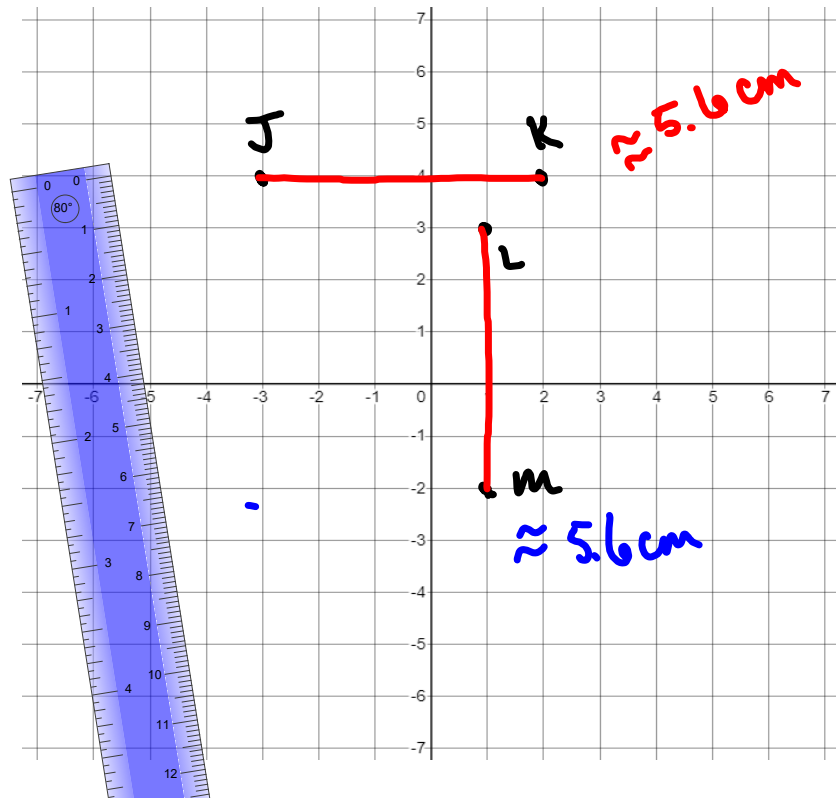
J: (-3, 4)

K: (2, 4)

L: (1, 3)

M: (1, -2)

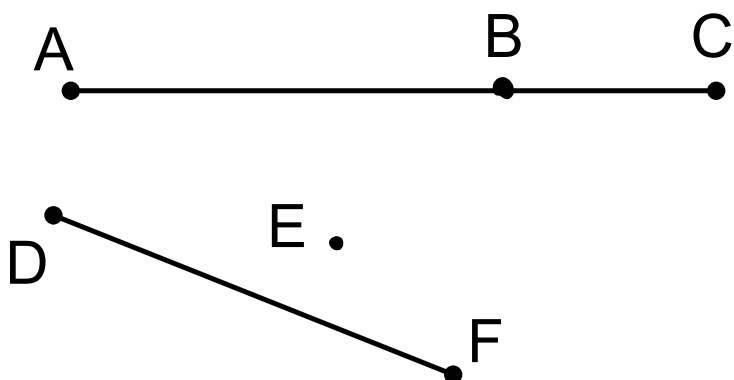
$JK \cong LM$



"Between"

Point B is between A and C.

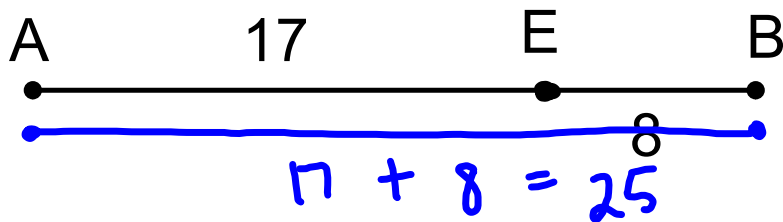
Is point E between D and F?



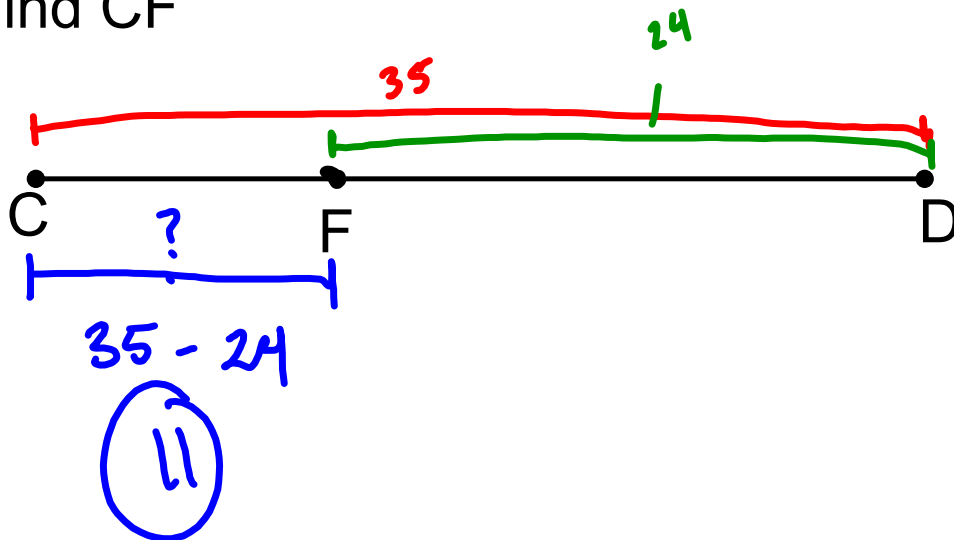
Points must be collinear to be "between". Point E is NOT between D and F.

Finding the length of a segment:

Find AB. ← Length

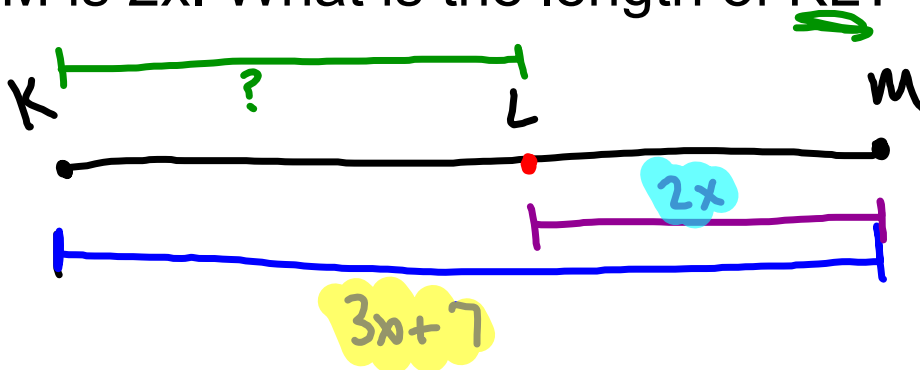


Find CF



Critical Thinking Question:

- Sketch a line segment KM (Make it decently long)
- Place a point L between K and M.
- The length of KM is  $3x + 7$ , and the length of LM is  $2x$ . What is the length of KL?



$$3x + 7 - 2x$$
$$\textcircled{1x + 7}$$

Homework:

Pg 16-18

#'s 9, 10, 15, 16, 19, 21, 27 (you do not need to explain reasoning), 28

## Attachments

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-7 to 7 Graph Picture.PNG