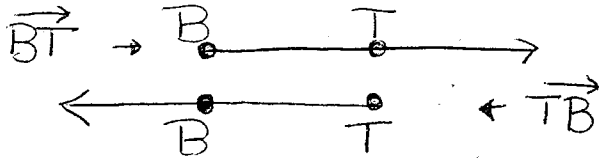
Lines, Rays, and Segments

Notation B-T-M
1) points are collinear
2) point T is between B + M

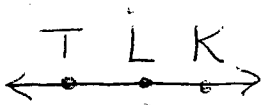
$\overleftrightarrow{AB}$ Line - geometric set of points that are straight + infinite

Line segment - part of a line with 2 distinct end points $\overline{CD} = \overline{DC}$

Ray - part of a line w/ one distinct end point
1) first letter indicates end pt.
2) second letter indicates direction



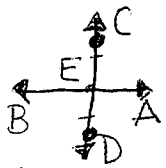
Opposite Rays - 2 rays w/ same end pt. which form a line



$\overleftarrow{LT}$ + $\overrightarrow{LK}$

TL

Congruent - to have the same measure
$\overline{AB} = \overline{CD}$
$\overline{AB} \cong \overline{CD}$

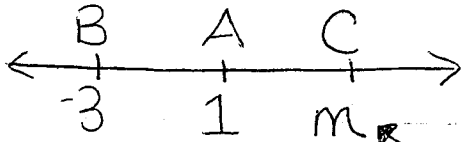


Bisect - to divide into 2 equal parts
$\overleftrightarrow{BA}$ bisects $\overline{CD}$ at E

Distance

A capital letter will represent a point (geometric)

A lower-case letter will represent a coordinate value (numerical)



represents a numerical value

Distance Between 2 Points

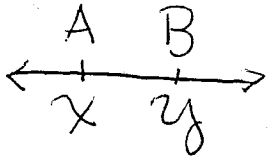
BA represents the distance between point 'B' and point 'A'

$BA = 4$

$AB = 4$

$AC = m - 1$

In general, $AB = |y - x|$ (def. of distance)



Collinear - set of points on the same line