Solve the following systems of equations:

$y = 3x - 2$

$x - y = 4$

$x - (3x - 2) = 4$

$x - 3x + 2 = 4$

$-2x + 2 = 4$

$-2 \quad -2$

$\frac{-2x}{-2} = \frac{2}{-2}$

$x = -1$

$y = 3(-1) - 2$

$y = -3 - 2$

$y = -5$

$(-1, -5)$

$5x + 4y = -7$

$+ \; -5x - 2y = 1$

$\frac{2y}{2} = \frac{-6}{2}$

$y = -3$

$5x + 4(-3) = -7$

$5x + -12 = -7$

$+12 \quad +12$

$\frac{5x}{5} = \frac{5}{5}$

$x = 1$

$(1, -3)$

1.1 - Building Blocks of Geometry

Point - has no size, only location

Line - straight, continuous arrangement of infinitely many points.

it has infinite length, but no thickness

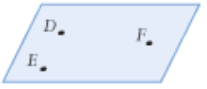
How to name the line:

$\overleftrightarrow{AB}$ $\overleftrightarrow{BA}$ $\overleftrightarrow{AC}$ $\overleftrightarrow{BC}$

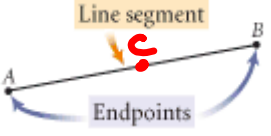
Plane - has length & width, but no thickness. Flat surface that extends infinitely along its length and width

Collinear - on the same line

Coplanar - on the same plane



Line Segment - consists of two points called the **end points** of the segment and all the points between them that are collinear with the two points



How to name a line segment:

$\overline{AB}$ $\overline{BA}$

~~$\overline{AC}$~~

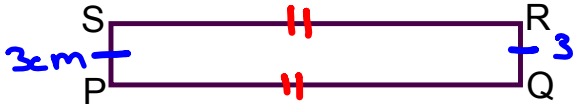
Go to page 26 in your text book

- read the bottom of the page to learn the difference between = and ≅

Equal to

Congruent to

Congruent - two segments are congruent if and only if they have equal measures, or lengths



$\overline{PQ} \cong \overline{SR}$ $\overline{SP} = \overline{RQ}$

$\overline{SP} \cong \overline{RQ}$

Midpoint - the point on the segment that is the same distance from both endpoints. The midpoint **bisects** the segment.

splits in half

Look and do the example on page 27

Ray -

August 16, 2019