1.2 - Linear Measure

Goals Aligned to Common Core State Standards:

- You will identify and model points and lines.
- You will identify, model, and calculate line segments, congruent segments, and segment addition postulate.
- You will construct a segments that is congruent to a given segment.
- MP 4, 5, 6

Point

- Model:

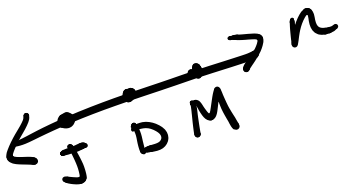
  • P

- Symbols:

  point P

Line

- Model:



- Symbols:

  line n

  $\overleftrightarrow{MD}$, $\overleftrightarrow{DM}$, $\overleftrightarrow{JD}$

Collinear - 2 or more pts on the same line

- **Line segment**
- Model:

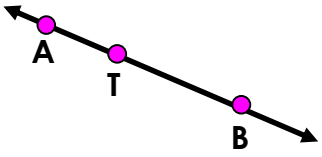
- Symbols line segment(object):

  $\overline{XY}$

- Symbols for length or measure of a line segment:

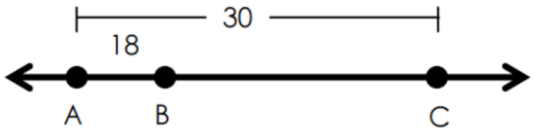
  XY

Segment Addition Postulate



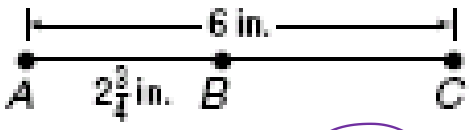
$\frac{AT}{part} + \frac{TB}{part} = \frac{AB}{whole}$

1. Find BC



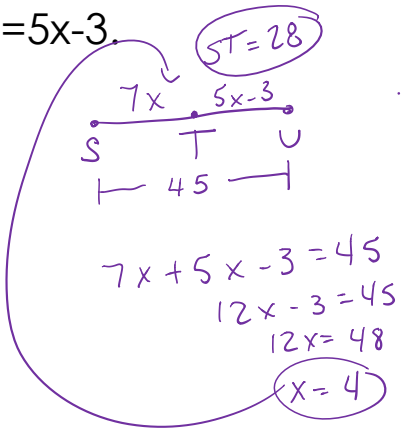
30
−18
BC = 12

2. Find BC



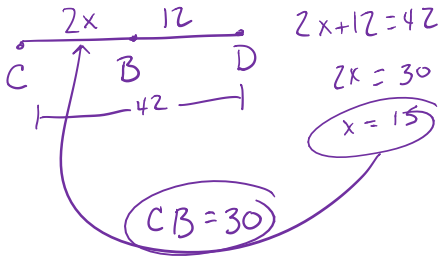
6 − 2¾ = 3¼

3. Find the value of x and ST if T is between S and U, ST=7x, SU=45, and TU=5x-3.



7x + 5x − 3 = 45
12x − 3 = 45
12x = 48
x = 4

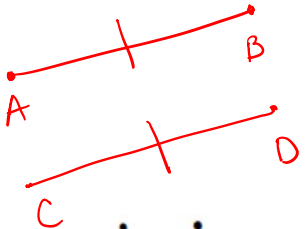
4. Find the value of x and BC if B is between C and D. CB=2x, CD=42, and BD=12.



2x + 12 = 42
2x = 30
x = 15
CB = 30

Congruent Segment

Model:



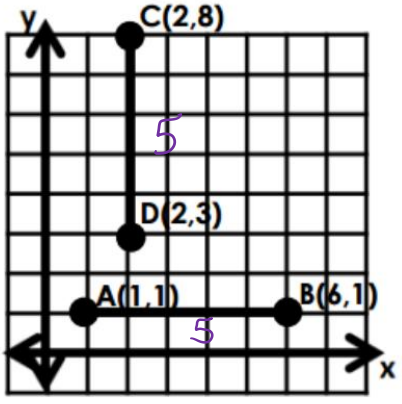
Symbols:

$\overline{AB} \cong \overline{CD}$

Example 1:

Use the diagram to determine whether $\overline{AB}$ and $\overline{CD}$ are congruent.

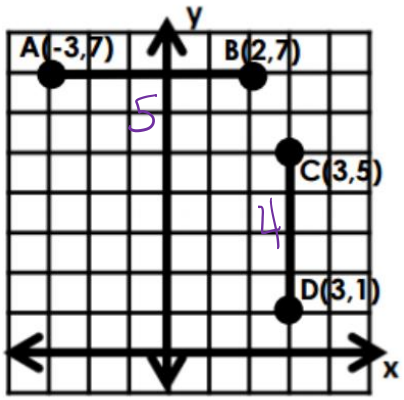
yes



Example 2:

Use the diagram to determine whether $\overline{AB}$ and $\overline{CD}$ are congruent.

no!



Pg. 17 Copy a Segment

<u>Goals Aligned to Common Core State Standards:</u>

- You can identify and model points and lines.
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- You can construct a segments that is congruent to a given segment.

Homework:

Pg. 18 #15-19odd, 20-26, 27-31odd, 37, 40 and

1.) $\frac{1}{3}+\frac{2}{3}=$

2.) $\frac{2}{3}+\frac{5}{4}=$

3.) $\frac{3}{4}-\frac{1}{3}=$

4.) $\frac{2}{3}\cdot\frac{5}{4}=$

5.) $\frac{2}{3}\div\frac{5}{4}=$

"What do you expect? My edition of the math book doesn't have the answers in it like yours does."