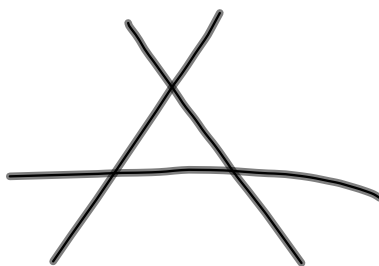
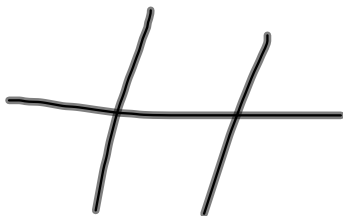
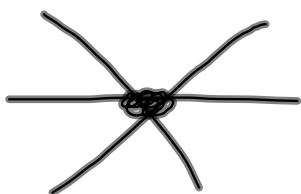


CB:



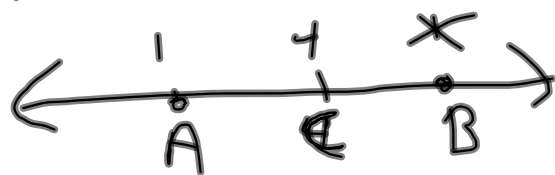
0-6+

3-10v

11↑-

1.2 Measuring & Constructing lines

Ruler Postulate: the points on a line can be put into a one to one relationship with the real numbers.

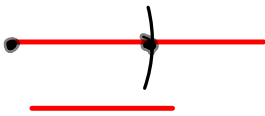


Distance: absolute of the difference of the points. Denoted as AB

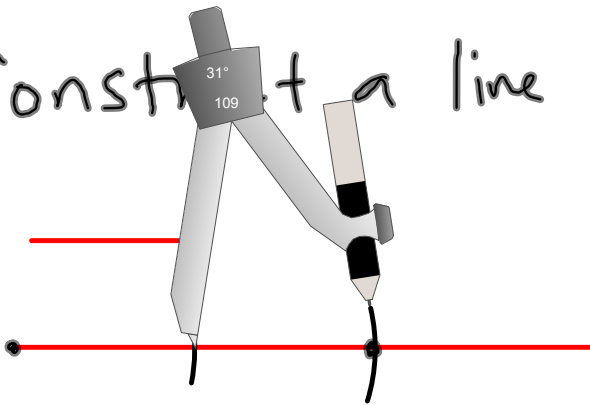


Construction: precise way to construct a figure w/o a ruler.

Ex: Construct a line congruent to:

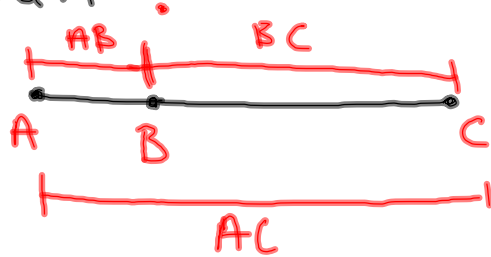


Construct a line twice the length of:



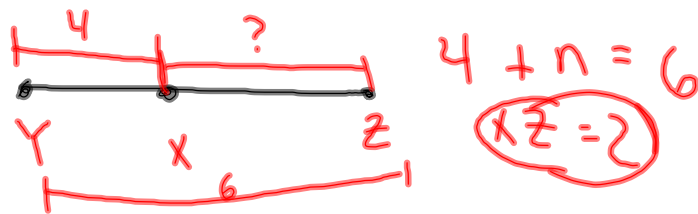
Segment Addition Postulate

If B is between A and C,
then $AB + BC = AC$

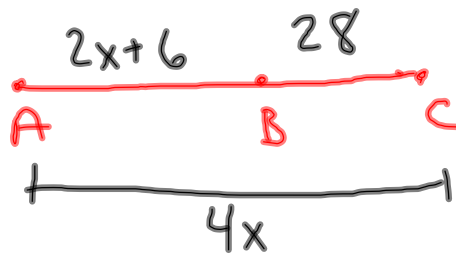


Ex: X is between Y and Z

$XY = 4$, $YZ = 6$ find XZ



Ex: B is between A and C



$$2x + 6 + 28 = 4x$$

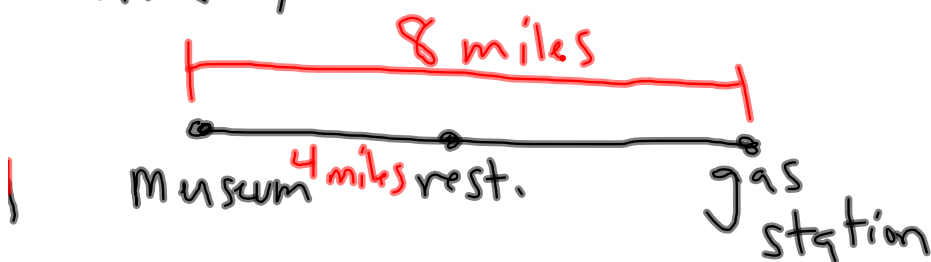
$$\begin{array}{r} 2x + 34 = 4x \\ -2x \quad \quad -2x \\ \hline \end{array}$$

$$\frac{34}{2} = \frac{2x}{2}$$

$$X = 17$$

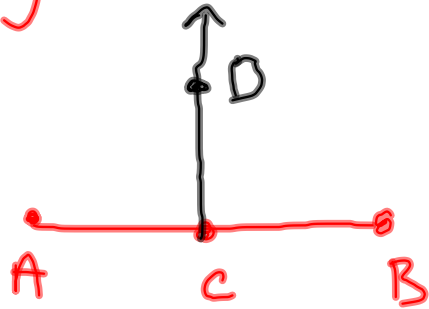
Midpoint: M , of \overline{AB} , is the point that bisects, or divides into 2 congruent segments, the segment \overline{AB}

Ex: You are at a math museum. You need to stop & get gas and are 8 miles away from the gas station. You also need to eat at the restaurant that is the mid point of the museum & the gas station. How far are you from the restaurant?



Segment bisector :

ray, segment, or line that intersects a segment at its midpoint.



\overrightarrow{CD} is the segment bisector of \overline{AB}

p. 17

1-35 odd, evens for extra credit