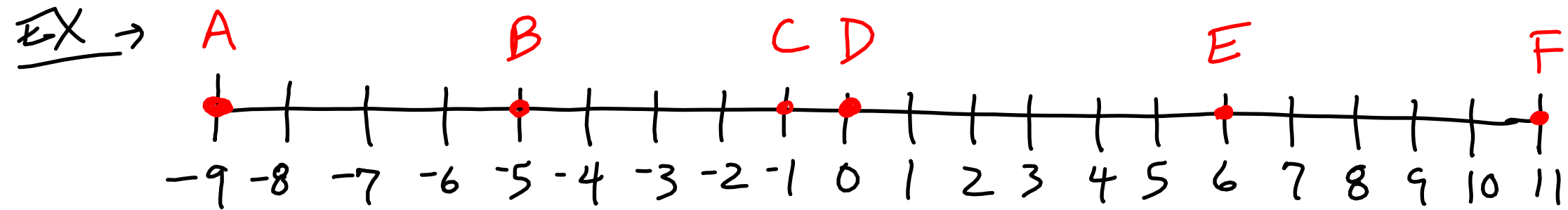


Segments

- length \rightarrow gap between 2 #s on # line



$$AB = 4$$

$$EF = 5$$

$$DB = 5$$

$$DE = 6$$

$$BC = 4$$

$$AC = 8$$

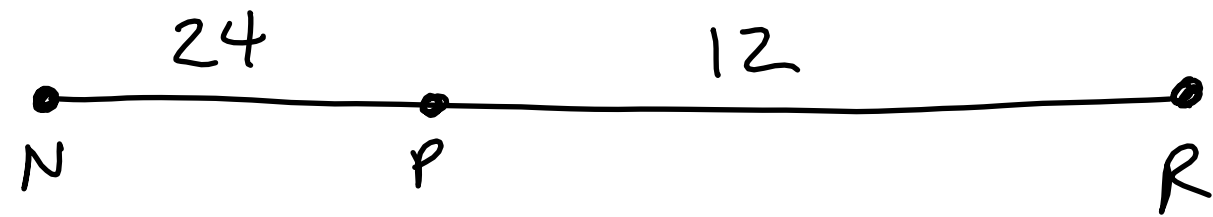
$$AF = 20$$

$$CE = 7$$

$$BE = 11$$

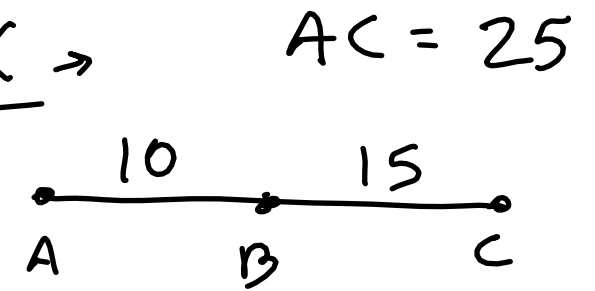
- can use length of multiple segments to find length of whole segment

EX →



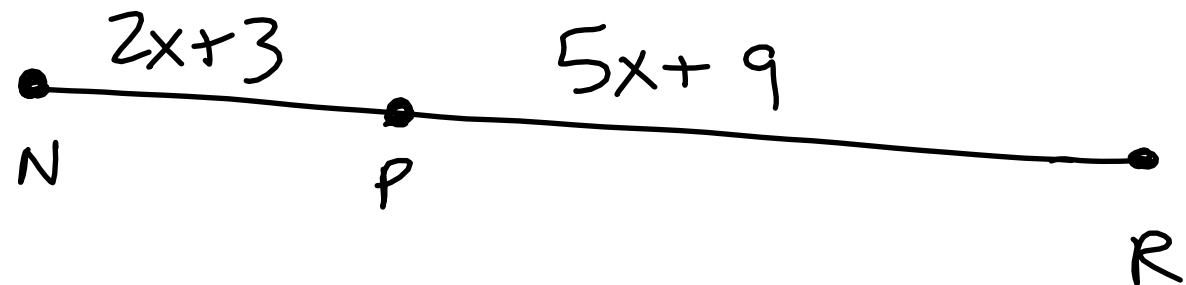
$$NR = \underline{36}$$

EX →



$$AC = 25$$

EX →



$$NR = 75$$

$$NP = ?$$

$$PR = ?$$

$$2x+3 + 5x+9 = 75$$

$$\begin{array}{r} 7x + 12 = 75 \\ -12 \quad -12 \\ \hline \end{array}$$

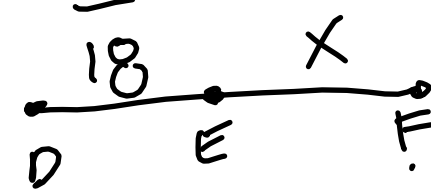
$$\begin{array}{r} x = 63 \\ \hline \end{array}$$

$$x = 9$$

$$NP = 2(9) + 3 = 21$$

$$PR = 5(9) + 9 = 54$$

EX → $DF = 44$

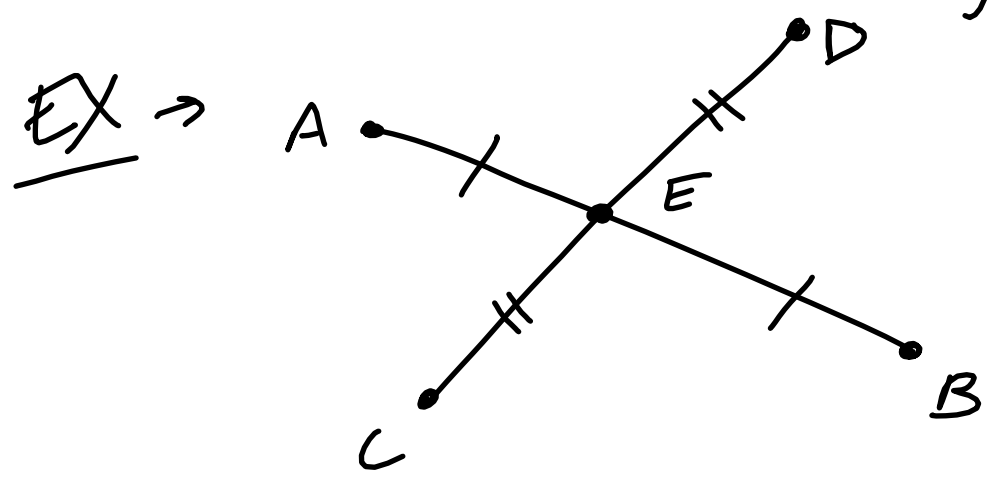


$$\begin{array}{r} 18 + x = 44 \\ -18 \quad -18 \\ \hline \end{array}$$

$$x = 26$$

- Equal segments are congruent (\cong)

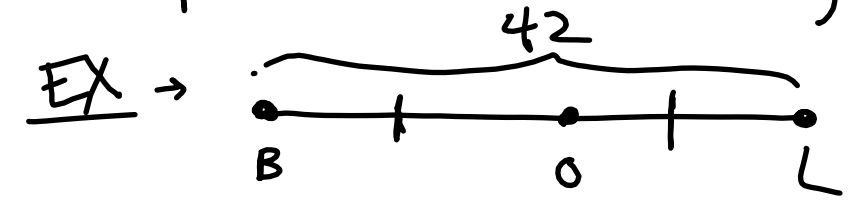
- hashmarks indicate congruency



$$\overline{AE} \cong \overline{BE}$$

$$\overline{CE} \cong \overline{DE}$$

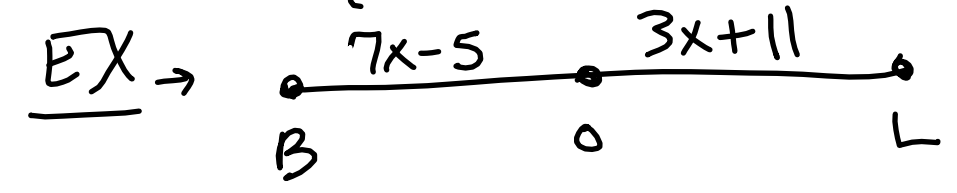
- Midpoints divide segments into 2 equal halves



O is midpoint

$$BO = \underline{21}$$

$$OL = \underline{21}$$



O is midpoint

$$7x - 5 = 3x + 11$$

$$\begin{array}{r} -3x \\ \hline 4x - 5 = 11 \end{array}$$

$$\begin{array}{r} +5 \\ \hline 4x = 16 \end{array}$$

$$\begin{array}{r} \cancel{4}x = \frac{16}{\cancel{4}} \\ \hline x = 4 \end{array}$$

$$x = 4$$

$$BO = 7(4) - 5 = 28 - 5 = 23$$

$$OL = 23$$

$$BL = 46$$

HW: p. 24 → 8-22, 39, 40, 43