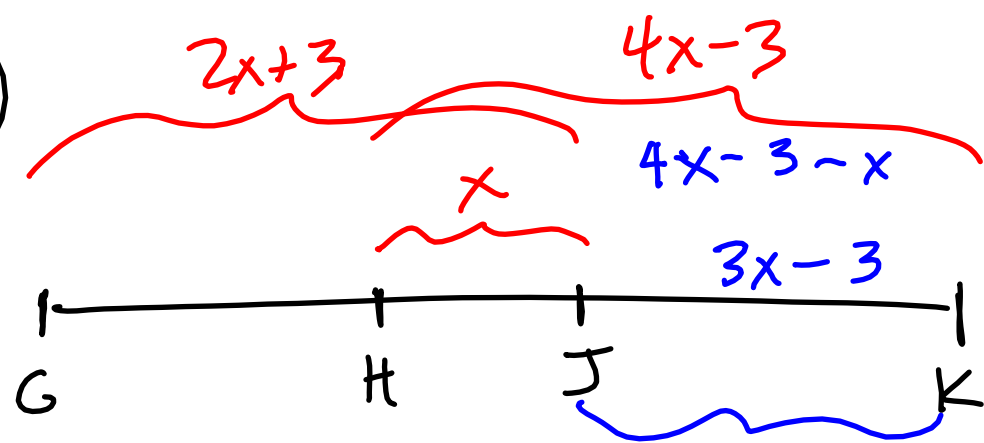


43



$$2x+3 + 3x-3 = 30$$

$$5x = 30$$

$$x = 6$$

14

$$8y+4 + 4y+8 = 15y-9$$

$$12y+12 = 15y-9$$

$$21 = 3y$$

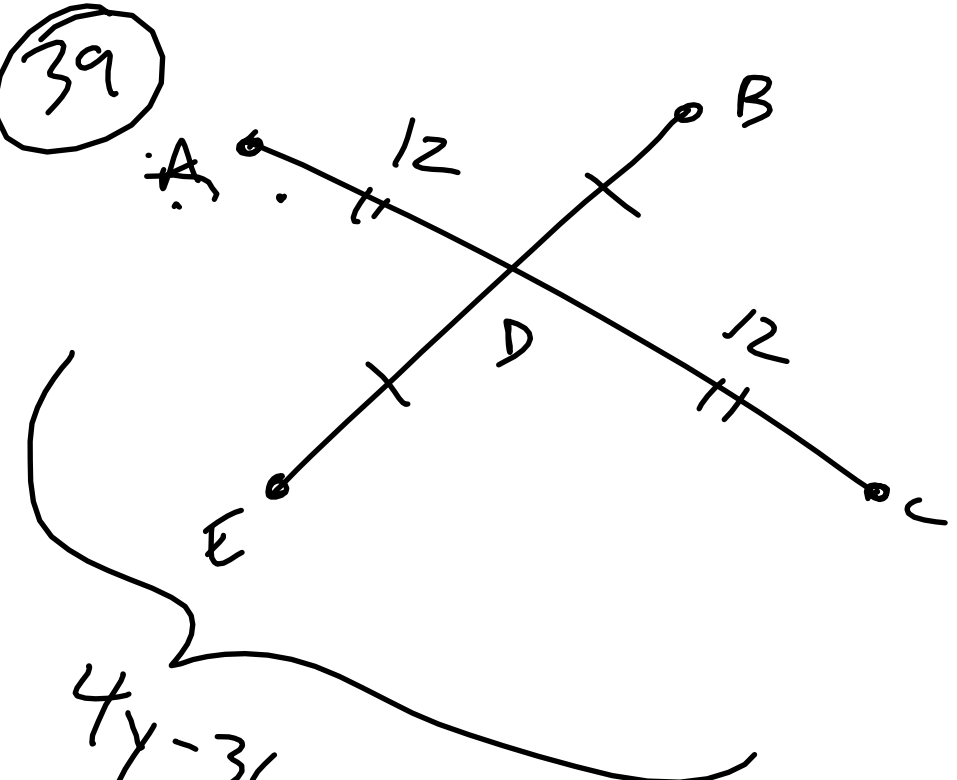
$$y = 7$$

19

$$3x = 5x - 6$$

$$-2x = -6$$

$$x = 3$$



$y = ?$   
 $AC = ? = 24$   
 $DC = ? = 12$

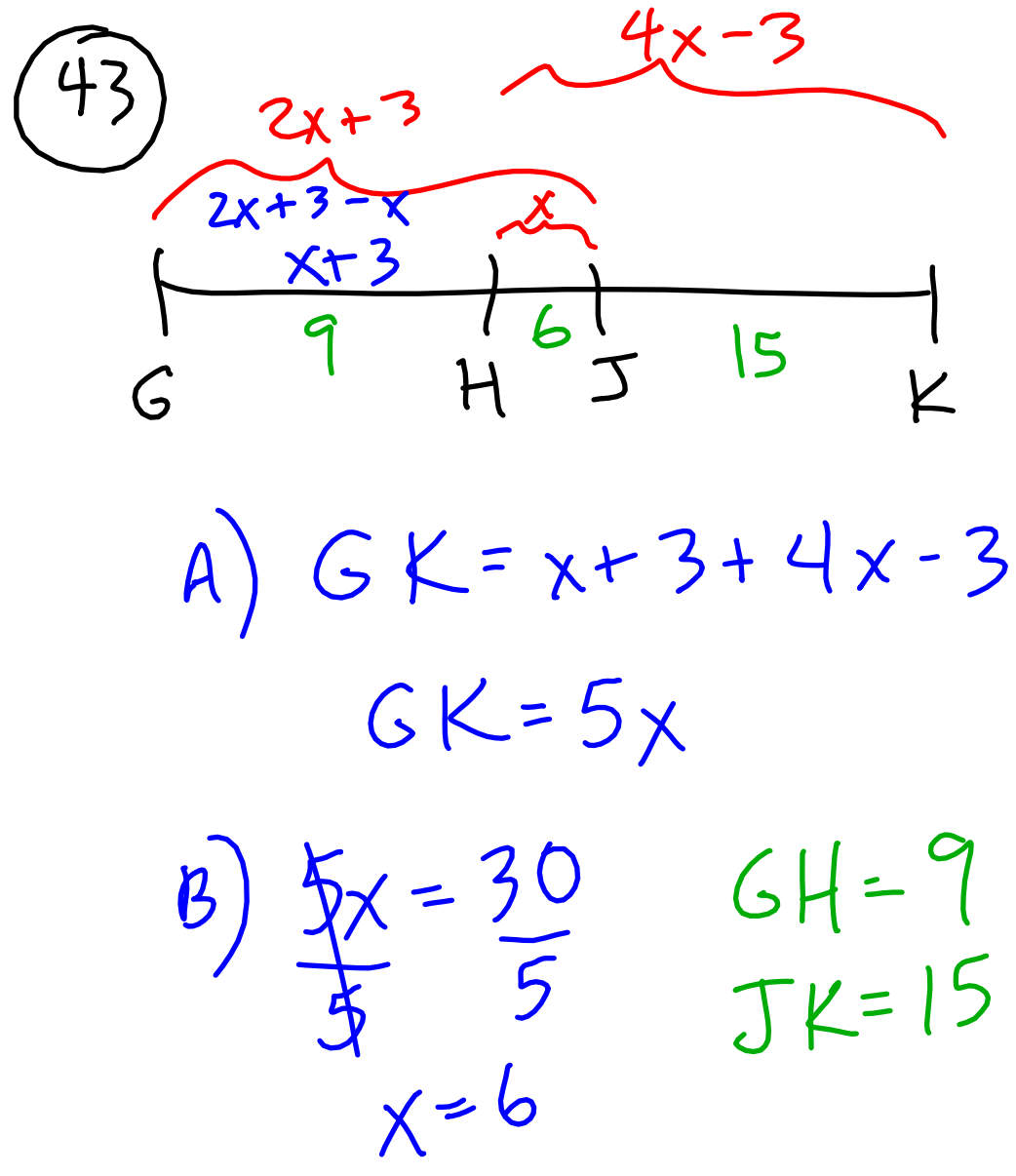
~~$4y - 36 = 24$~~   
 ~~$+36$~~   ~~$+36$~~   
 ~~$4y = 60$~~   
 ~~$\frac{4}{4}$~~   ~~$\frac{4}{4}$~~   
 $y = 15$

40

$$x + 4 = 3x - 8$$

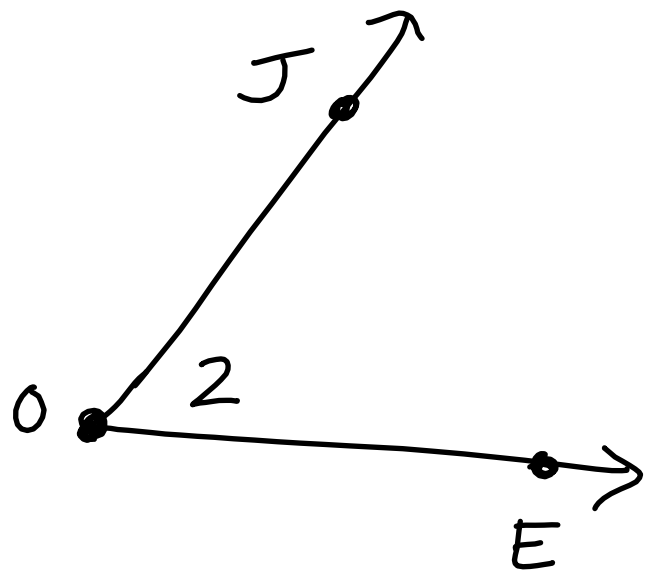
$$\begin{array}{r} -x \\ \hline 4 = 2x - 8 \\ +8 \quad +8 \\ \hline 12 = 2x \\ x = 6 \end{array}$$

$ED = 6 + 4 = 10$   
 $DB = 10$   
 $EB = 20$



# Angles

- made by 2 rays w/ same endpoint (vertex)

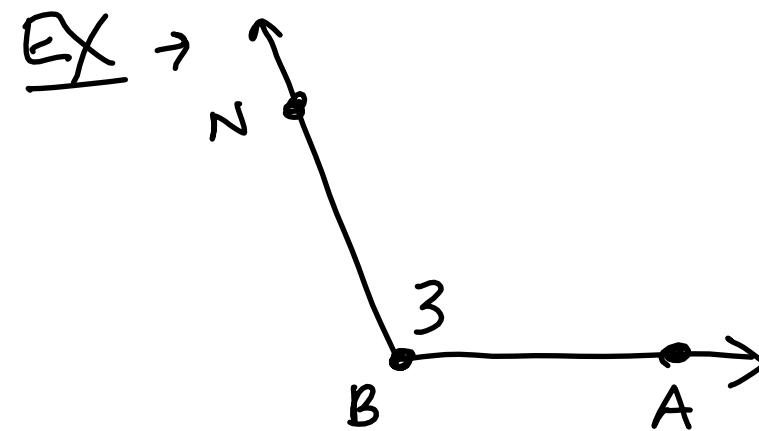


Ways to name

1) Vertex only  $\Rightarrow \angle O$

2) # only  $\Rightarrow \angle 2$

3) 3 points  $\Rightarrow \angle JOE, \angle EOJ$   
*↑ vertex in middle*



$\angle B, \angle 3,$   
 $\angle NBA, \angle ABN$

## - Measuring Angles

- Acute  $\rightarrow 0^\circ < x < 90^\circ$

- Right  $\rightarrow 90^\circ$  (square in corner)

- Obtuse  $\rightarrow 90^\circ < x < 180^\circ$

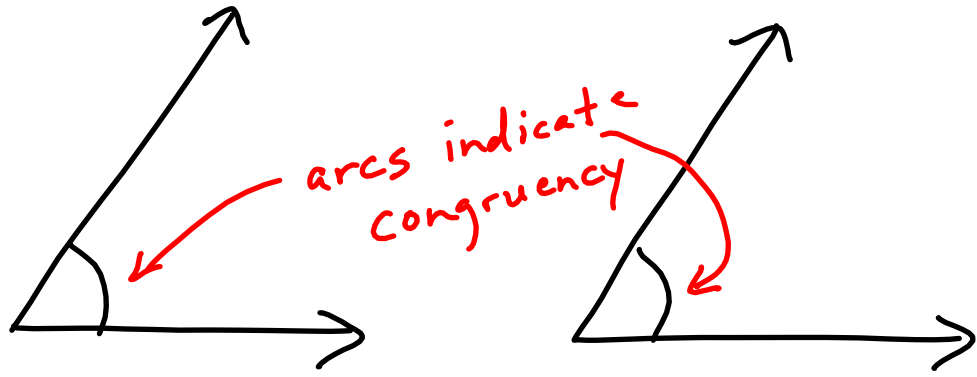
- Straight  $\rightarrow 180^\circ$

⊛ - measure of angle  $\Rightarrow m\angle$  \_\_\_\_\_

EX  $\rightarrow m\angle ABC = 87^\circ$

- Congruent angles have same angle measure

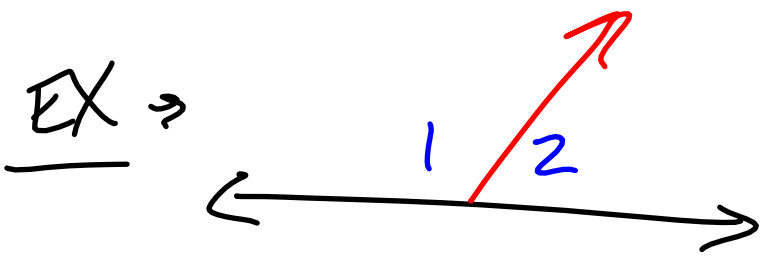
$$m\angle 1 = m\angle 2 \Rightarrow \angle 1 \cong \angle 2$$



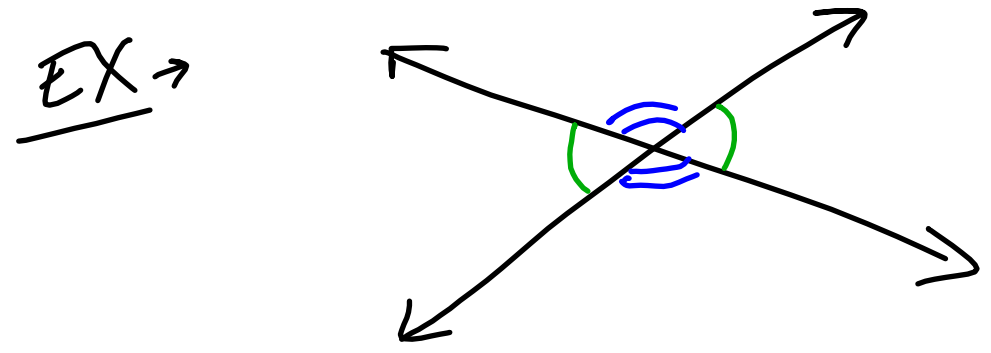
HW: p. 31  $\rightarrow$  6-14, 18-23

- Angle Pairs

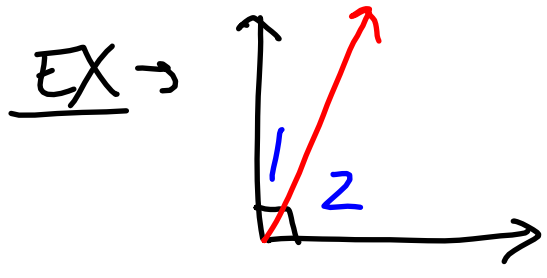
- adjacent  $\angle$ 's  $\Rightarrow$  common side



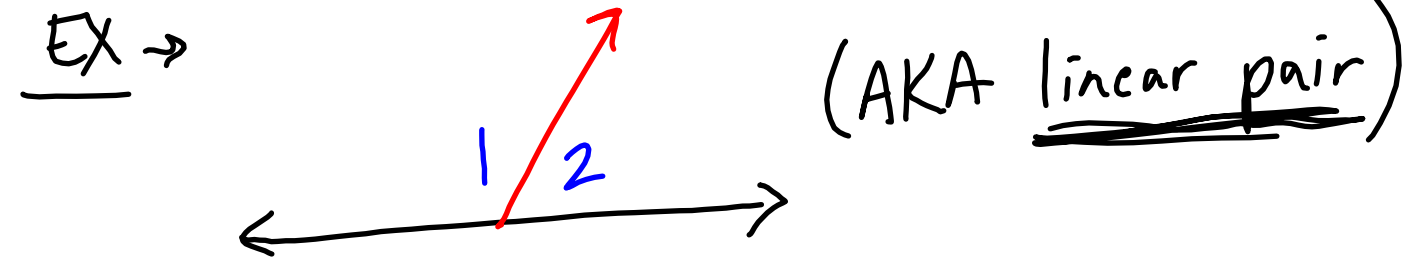
- vertical  $\angle$ 's  $\Rightarrow$  across from one another, made by 2 intersecting lines



- complementary  $\angle$ 's  $\Rightarrow$  add to  $90^\circ$



- supplementary  $\angle$ 's  $\Rightarrow$  add to  $180^\circ$



HW : p. 38 → 8-36 even, 37AB, 40