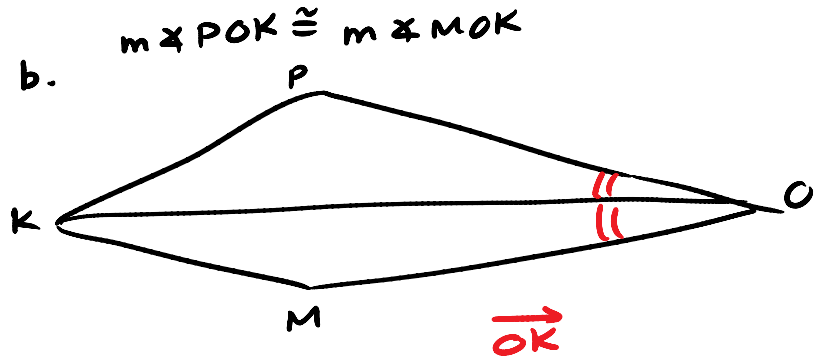
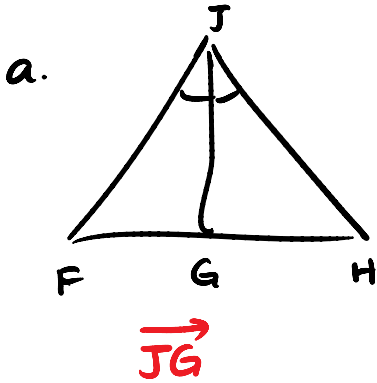
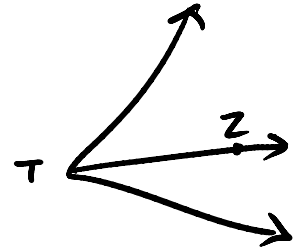


#3 Name the angle bisector

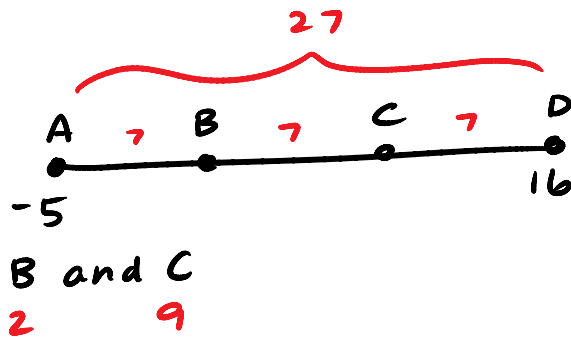


#4 Find $\angle XTZ$ if \vec{TZ} bisects the angle



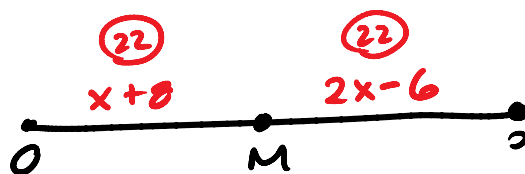
- a. 60° 30°
- b. $48^\circ 50'$ $24^\circ 25'$
- c. $36\frac{1}{2}^\circ$ $18\frac{1}{4}^\circ$
- d. $85^\circ 74'$ \Rightarrow $42.5^\circ 37'$
 $42^\circ 67'$
 $43^\circ 7'$

#5 B and C trisect \overline{AD}



- a Find the coordinates of B and C
2 9
- b Find AC 14

#6 Given. $OM = x + 8$
 $MP = 2x - 6$
 $OP = 44$
 Is M the midpt?



$$x + 8 + 2x - 6 = 44$$

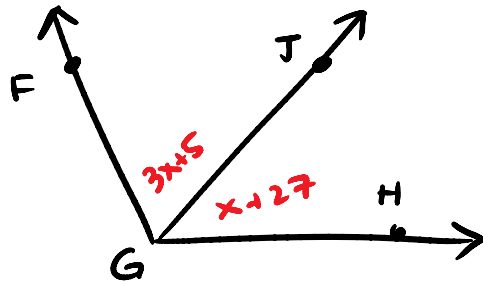
$$3x + 2 = 44$$

$$3x = 42$$

$x = 14$

YES!

- #7 Given: $m \angle FGJ = 3x - 5$
 $m \angle JGH = x + 27$
 \overrightarrow{GJ} bisects $\angle FGH$



Find: $m \angle FGJ$

$$3x - 5 = x + 27$$

$$2x = 32$$

$$x = 16$$

$$m \angle FGJ = 3(16) - 5$$

$$= 48 - 5$$

$$= \boxed{43}$$

- #8 B and C are trisection points of \overline{AD} and $AD = 12$

a. Find AB $\boxed{4}$

b. Find AC $\boxed{8}$

- c. If $AB = x + 3$ solve for x

$$x + 3 = 4$$

$$\boxed{x = 1}$$

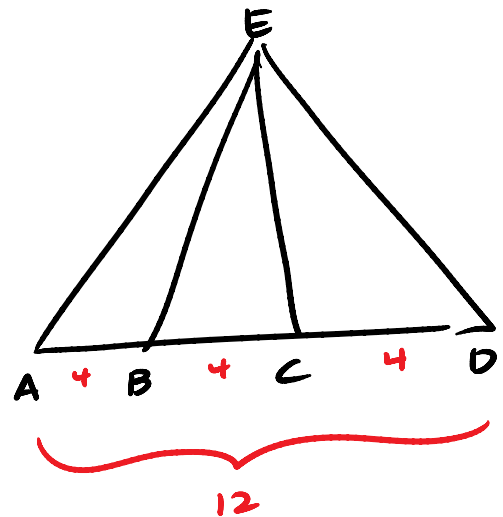
- d. If $AB = x + 3$ and $AE = 3x + 6$

Find AE

$$3(1) + 6$$

$$3 + 6$$

$$\boxed{9}$$



- e. What segment is C the midpoint of? \overline{BD}

- f. Do \overrightarrow{EB} and \overrightarrow{EC} trisect $\angle AED$? No (not necessarily)

#9 Given: $\angle ABC = 90^\circ$
 $\angle 1 = 2x + 10$ 30°
 $\angle 2 = x + 20$ 30°
 $\angle 3 = 3x$ 30°

Has $\angle ABC$ been trisected?

$$2x + 10 + x + 20 + 3x = 90$$

$$6x + 30 = 90$$

$$6x = 60$$

$$x = 10$$

YES

