

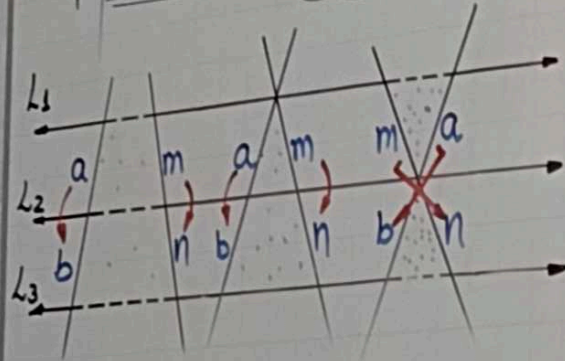
PROPORCIONALIDAD

SEMEJANZA

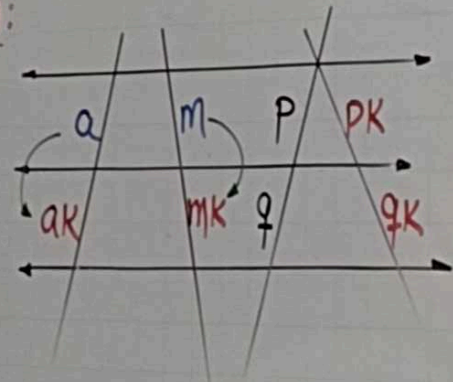
$l_1 \parallel l_2 \parallel l_3$

THALES

$$\frac{a}{b} = \frac{m}{n}$$

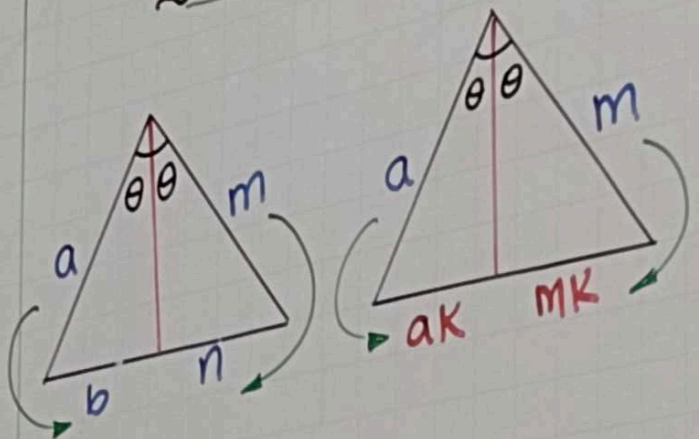


NOTA:



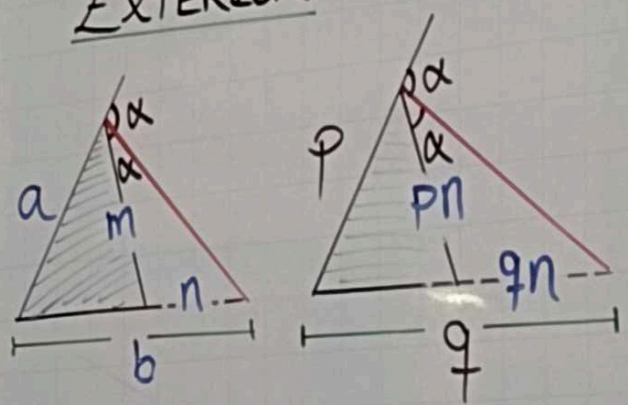
BISECTRIZ INTERIOR

$$\frac{a}{b} = \frac{m}{n}$$



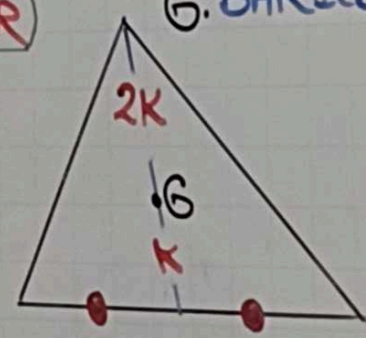
BISECTRIZ EXTERIOR

$$\frac{a}{b} = \frac{m}{n}$$

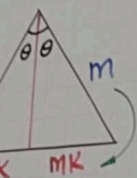


RECORDAR

G: BARICENTRO



$$\frac{a}{b} = \frac{m}{n}$$

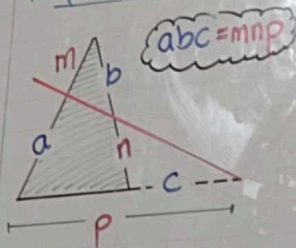


$$\frac{m}{n}$$

$$\frac{m}{n}$$

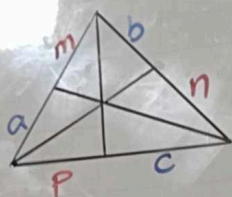
ICENTRO

◊ MENELAO



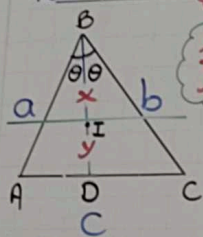
CEVA

$$abc = mnp$$



◊ INCENTRO

PUNTO  
INTERS.  
RIS. INT.

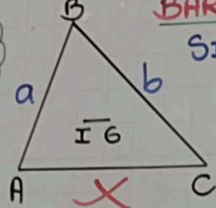


$$\frac{x}{y} = \frac{a+b}{c}$$

◊ INCENTRO

BARICENTRO

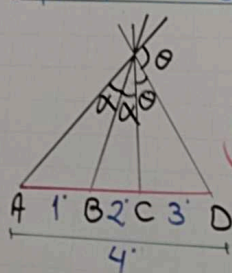
SI:  $\overline{IG} \parallel \overline{AC}$



$$X = \frac{a+b}{2}$$

◊ HAZ ARMÓNICO

CUATERNARIA ARMÓNICA:

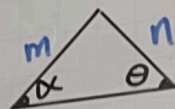
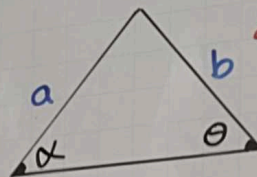


$$\frac{AB}{BC} = \frac{AD}{CD}$$

① DESCARTES:

$$\frac{1}{AB} + \frac{1}{AD} = \frac{2}{AC}$$

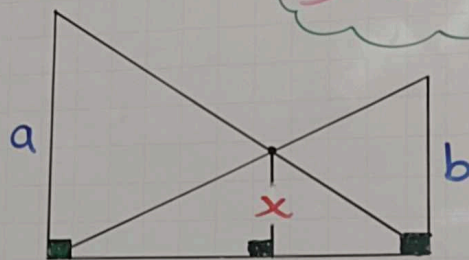
SEMEJANZA



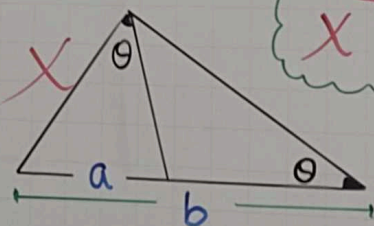
$$\frac{a}{b} = \frac{m}{n}$$

PROPIEDADES

$$X = \frac{ab}{a+b}$$

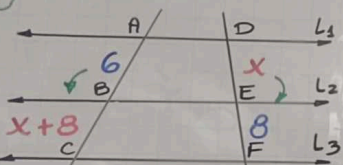


$$X^2 = ab$$





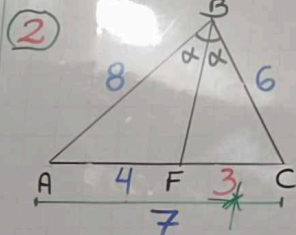
1)  $BC - DE = 8$



$$\frac{6}{x+8} = \frac{x}{8} \Rightarrow 48 = x^2 + 8x$$

$$4 = x^2$$

$$BC = 12$$



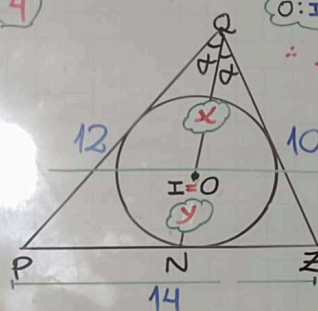
3)

$$\frac{7}{3+x} = \frac{5}{x}$$

$$7x = 15 + 5x$$

$$x = 7,5$$

4)



O: INCENTRO

$$\frac{x}{y} = \frac{12+10}{14}$$

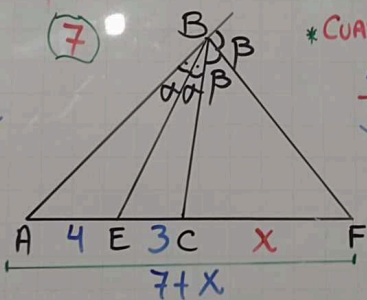
$$\frac{x}{y} = \frac{11}{7}$$

5)

$$6 \cdot 7 \cdot 2 = 4 \cdot 5 \cdot (x+2)$$

$$\frac{11}{5} = x$$

7)

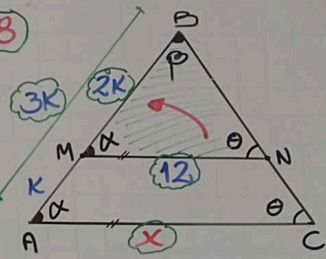


\* CUATERNA ARMO...

$$\frac{4}{3} = \frac{7+x}{x}$$

$$x = 21$$

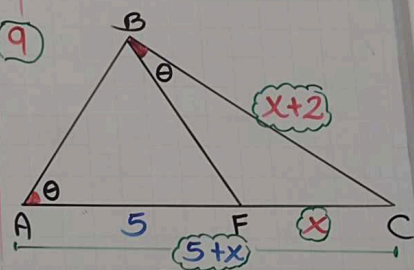
8)



$\triangle MBN \sim \triangle ABC$

$$\frac{2K}{12} = \frac{3K}{x} \Rightarrow x = 18$$

9)



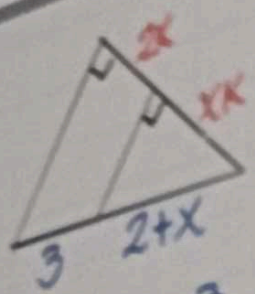
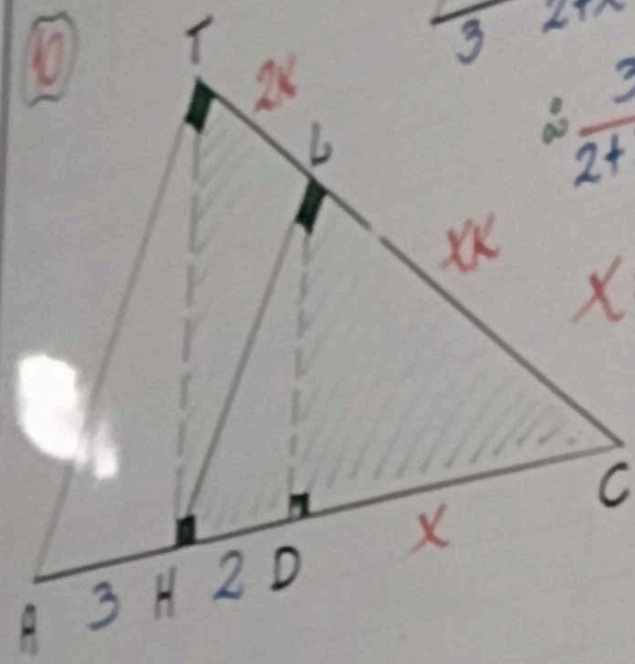
$$BC - FC = 2$$

$$(x+2)^2 = x(5+x)$$

$$x^2 + 4x + 4 = 5x + x^2$$

$$4 = x$$

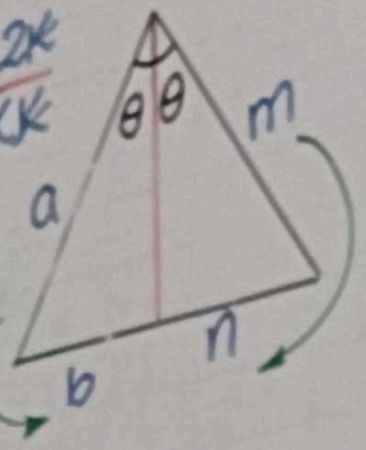
(10)



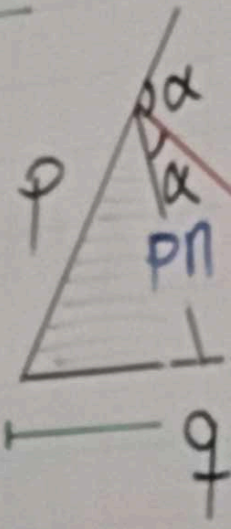
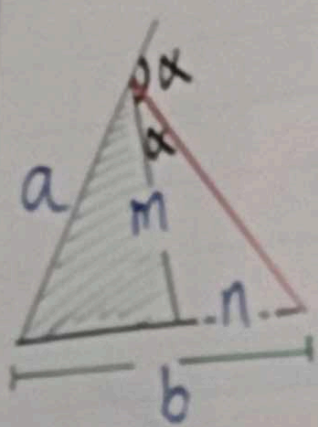
$$\frac{3}{2+x} = \frac{2x}{x}$$

$$x = 4$$

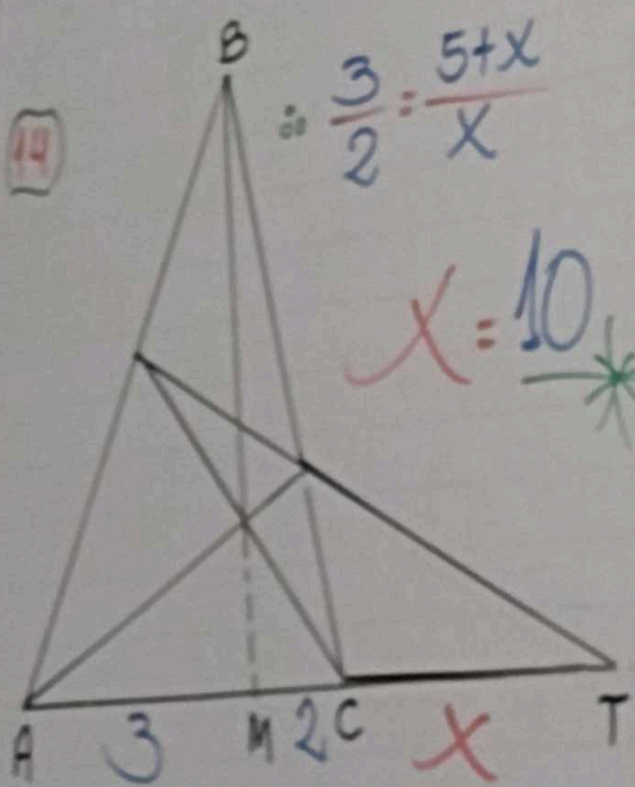
BISECTRIZ INTERIOR



BISECTRIZ EXTERIOR



(14)



$$\frac{3}{2} = \frac{5+x}{x}$$

$$x = 10$$

RECORDAR

G: BAR

