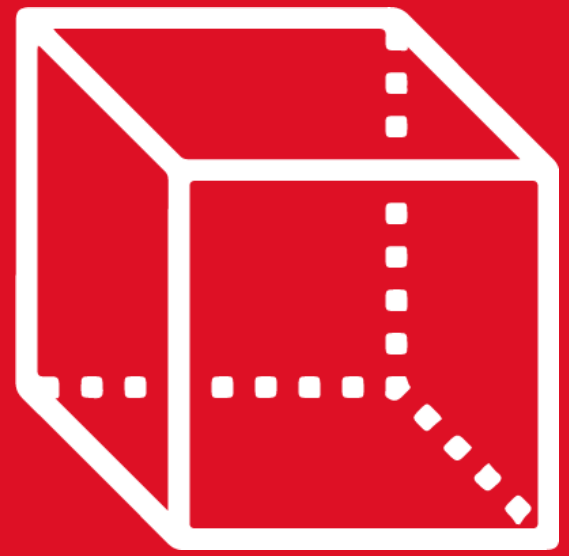
GEOMETRÍA

RETROALIMENTACIÓN

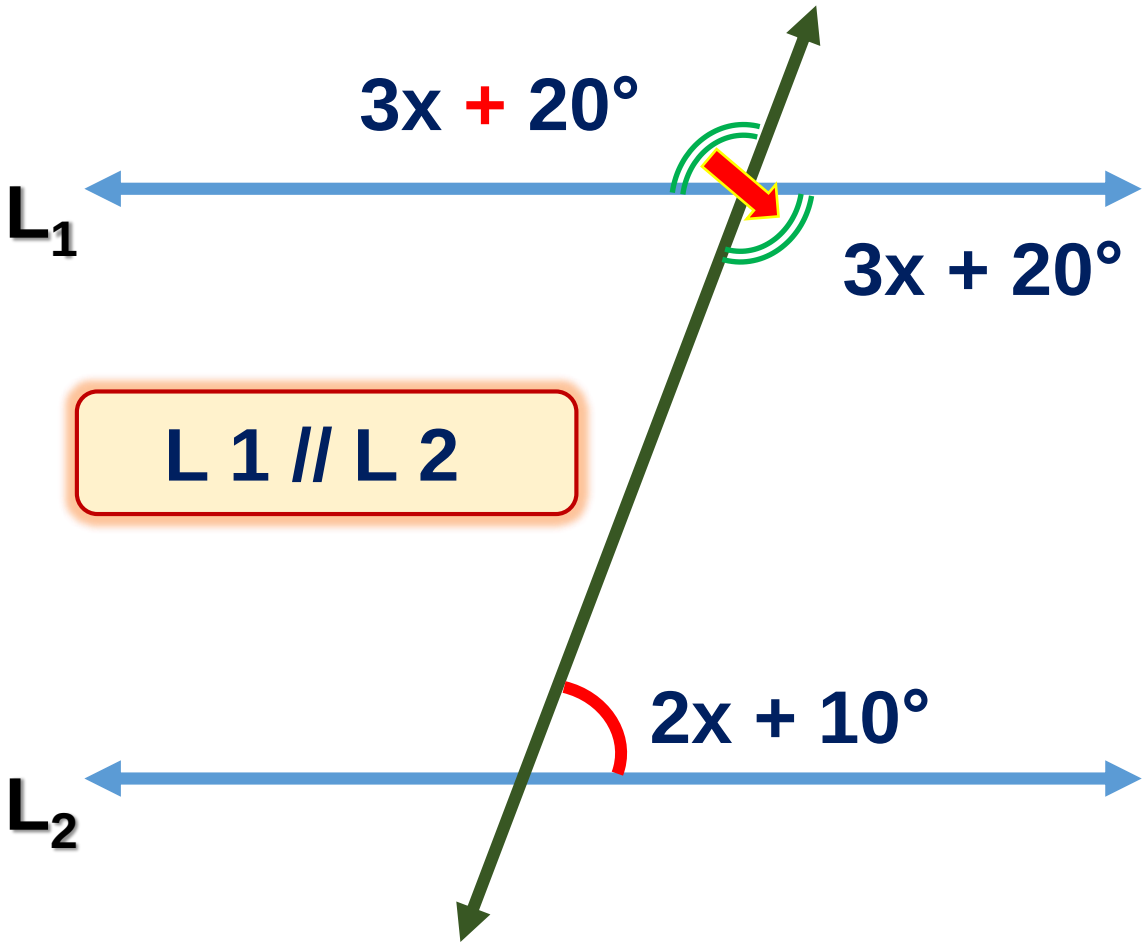


2nd
SECONDARY

SACO OLIVEROS

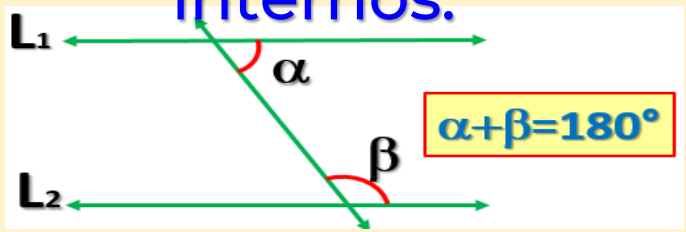
TOMO 2

1. Si $\overleftrightarrow{L_1} \parallel \overleftrightarrow{L_2}$, halla el valor de x.



RECORDEMOS

Ángulos conjugados internos:



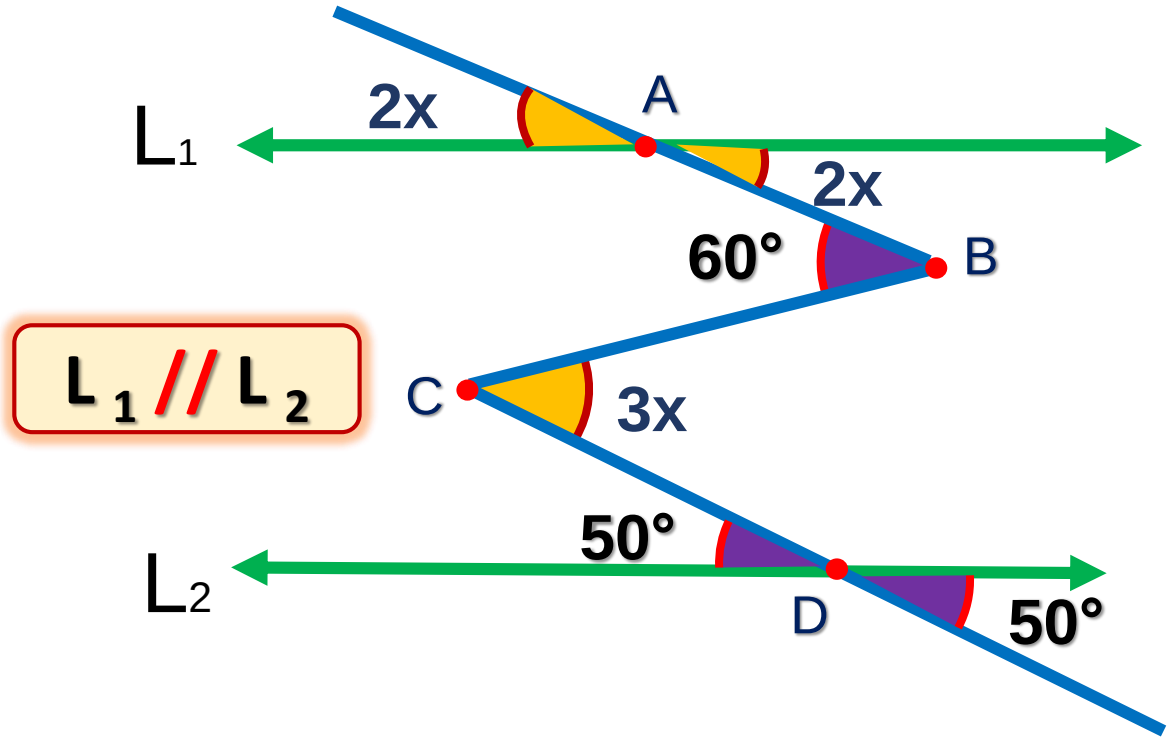
$x + 20° + 2x + 10° = 180°$

$5x + 30° = 180°$

$5x = 150°$

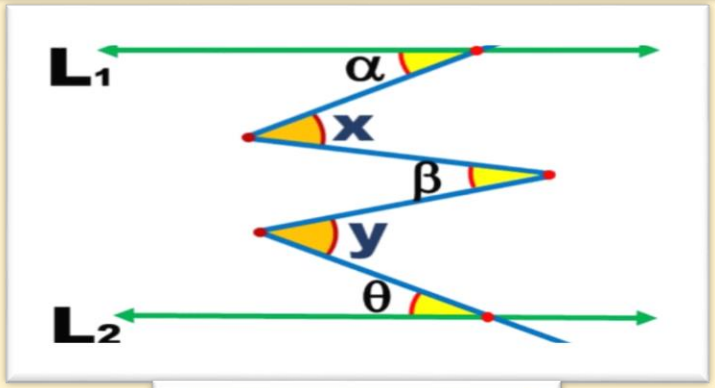
$x = 30°$

2. Si $\overleftrightarrow{L_1} \parallel \overleftrightarrow{L_2}$, halle x.



$L_1 \parallel L_2$

RECORDEMOS



$x+y = \alpha+\beta+\theta$

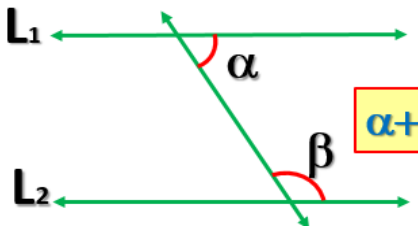
$3x + 2x = 60° + 50°$

$5x = 110°$

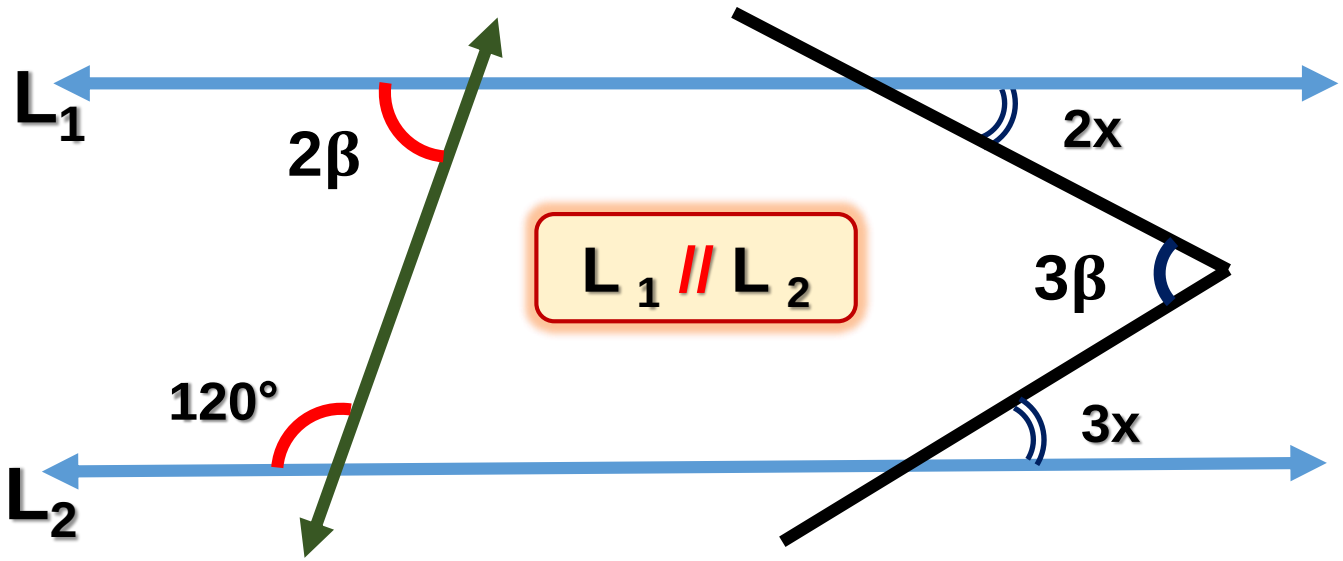
$x = 22°$

3. Si $\overleftrightarrow{L_1} \parallel \overleftrightarrow{L_2}$, halla el valor de x.

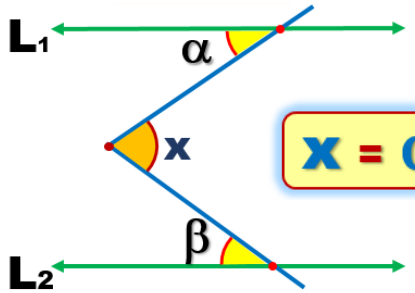
Ángulos conjugados



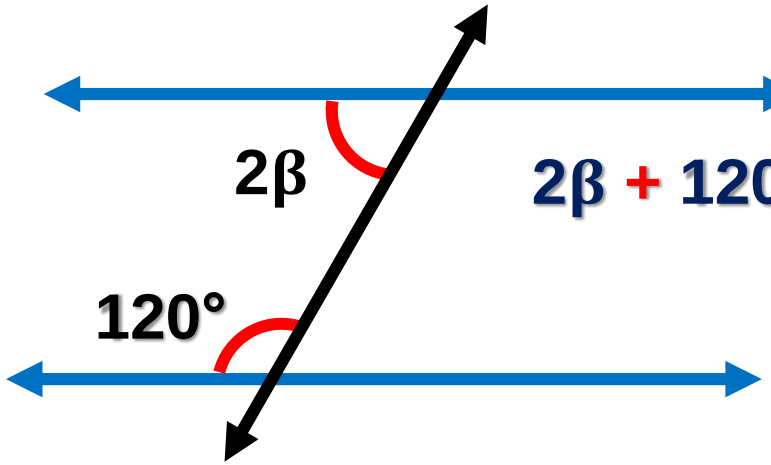
$\alpha+\beta=180°$



$L_1 \parallel L_2$



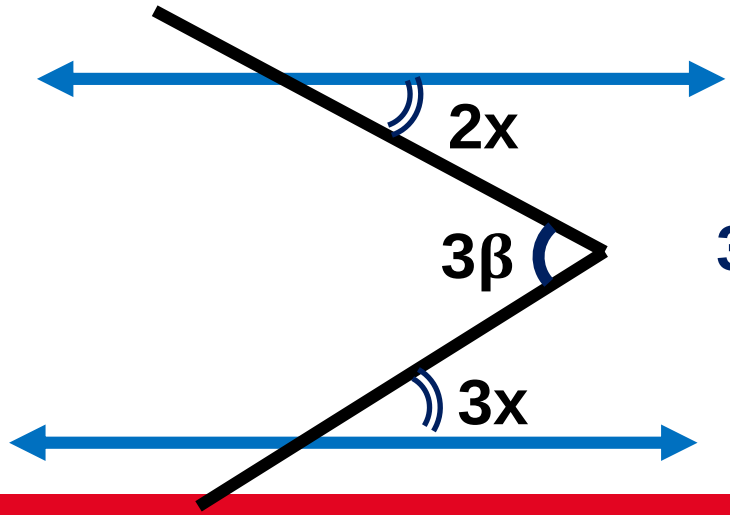
$x = \alpha+\beta$



$2\beta + 120° = 180°$

$2\beta = 60°$

$\beta = 30°$

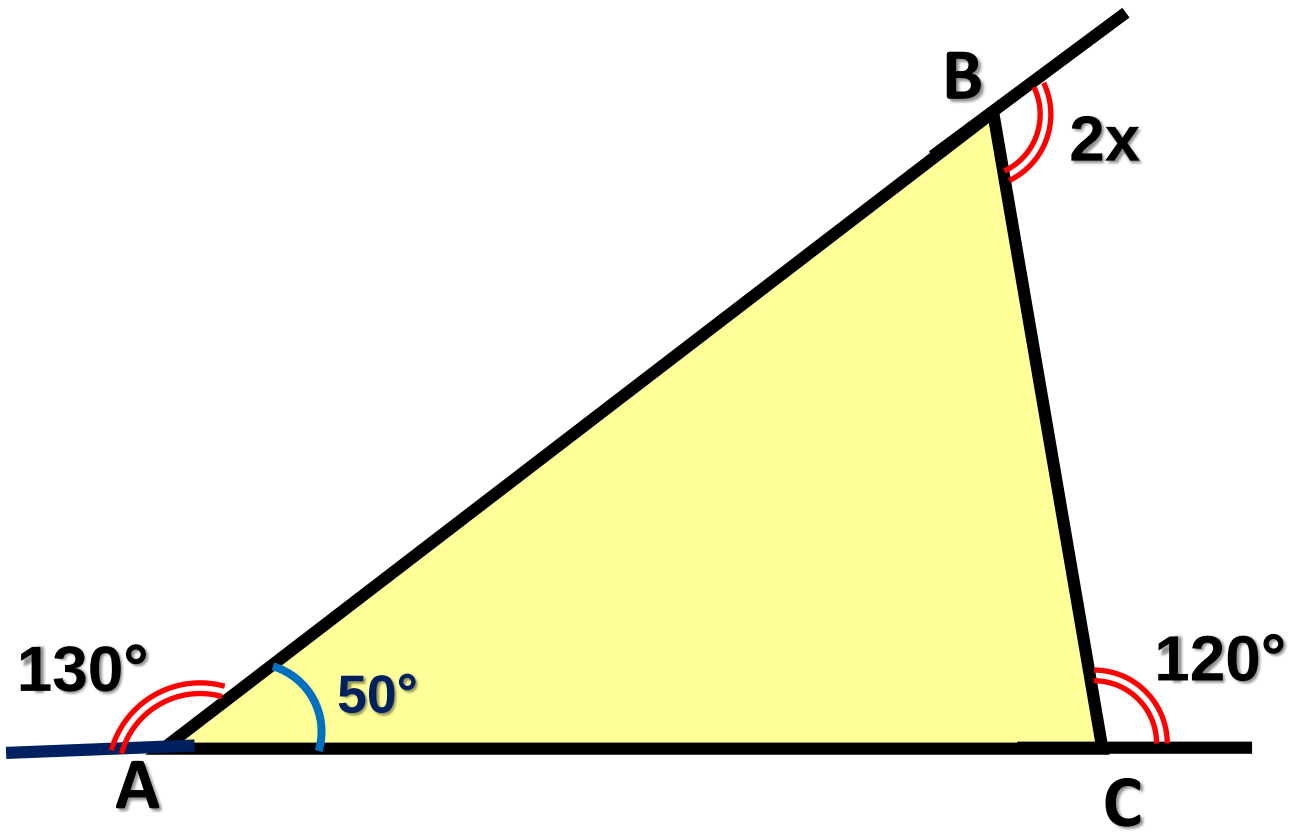


$3\beta = 2x + 3x$

$3(30°) = 5X$

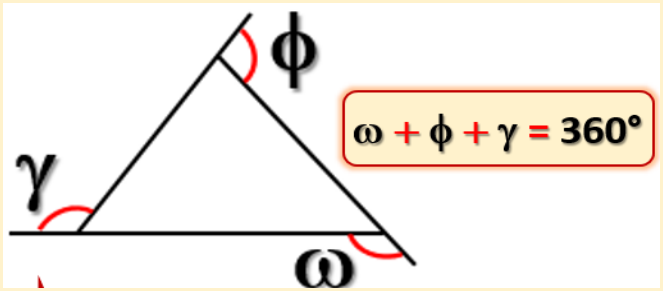
$x = 18°$

4. En el gráfico, halla el valor de x.



RECORDEMOS

Suma de ángulos



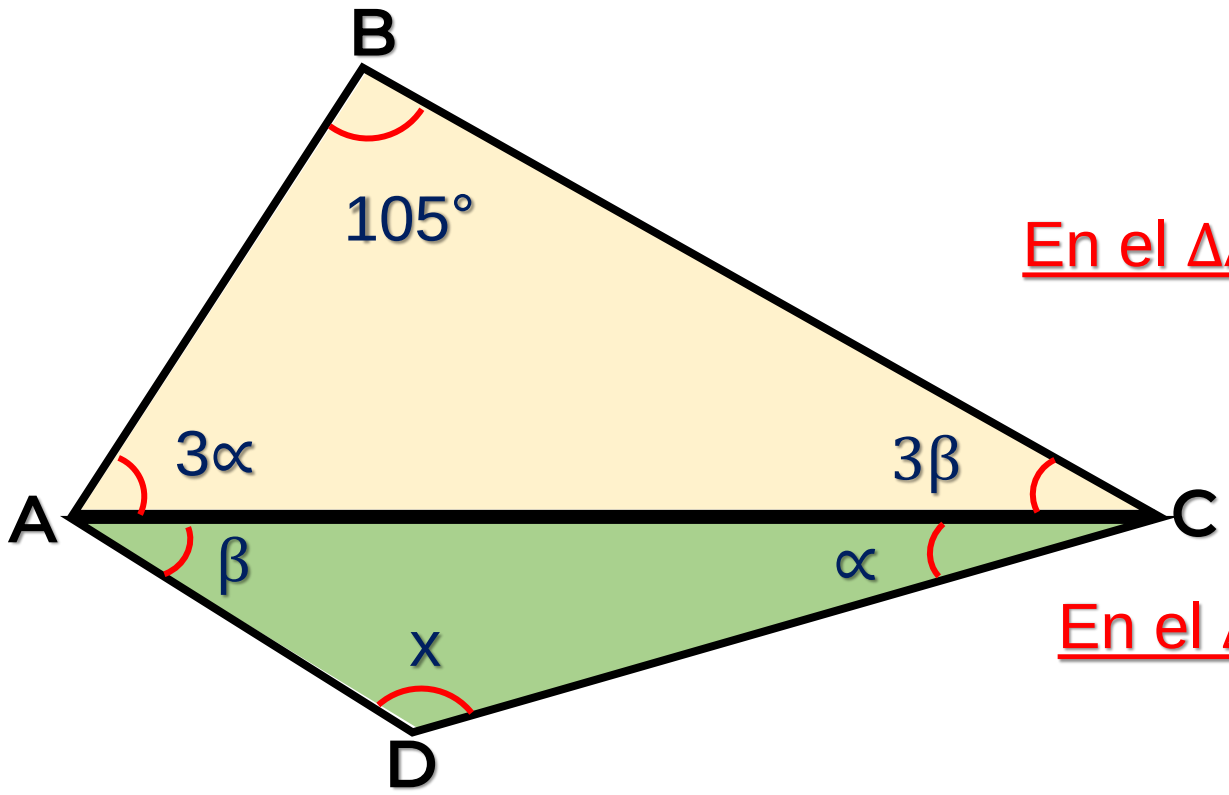
$2x + 130° + 120° = 360°$

$2x + 250° = 360°$

$2x = 110°$

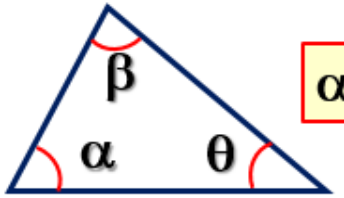
$x = 55°$

5. En el gráfico, halla el valor de x.



RECORDEMOS

Suma de ángulos internos:



$\alpha + \beta + \theta = 180°$

En el ΔABC:

$$3 \propto + 3\beta + 105° = 180°$$

$$3 \propto + 3\beta = 75°$$

$$\propto + \beta = 25°$$

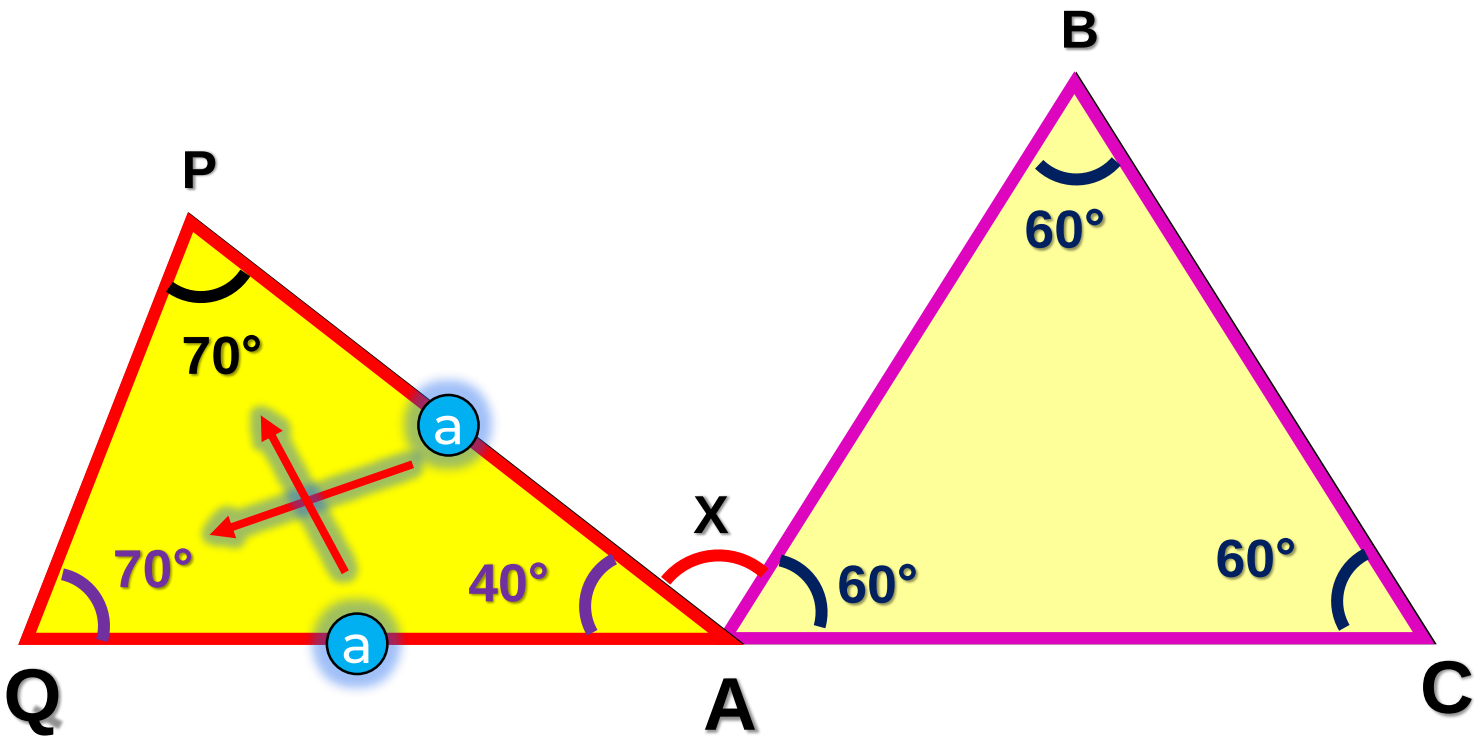
En el ΔADC:

$$\propto + \beta + x = 180°$$

$$25° + x = 180°$$

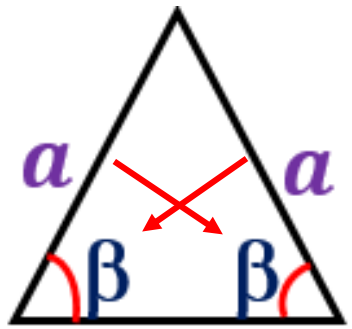
$$x = 155°$$

6. Si el triángulo ABC es equilátero y AP = AQ. Halle x

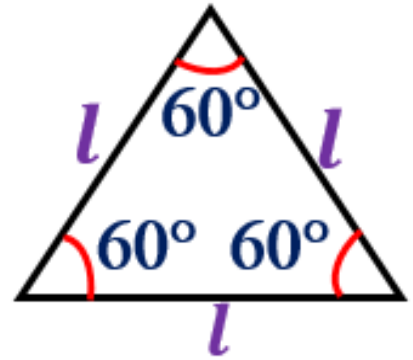


△Isósceles

AP = AQ



△Equilátero



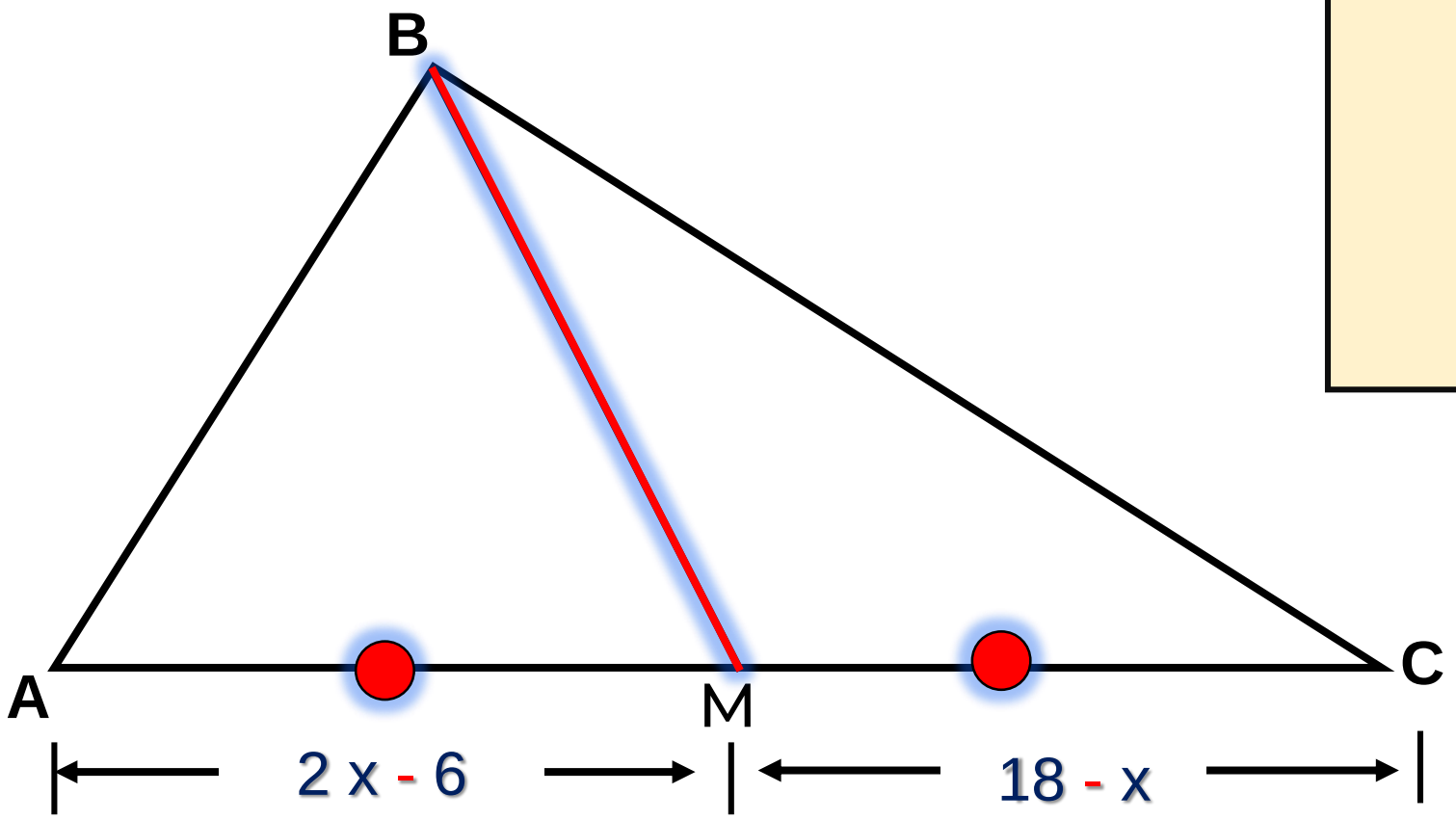
En el vértice A

$40° + x + 60° = 180°$

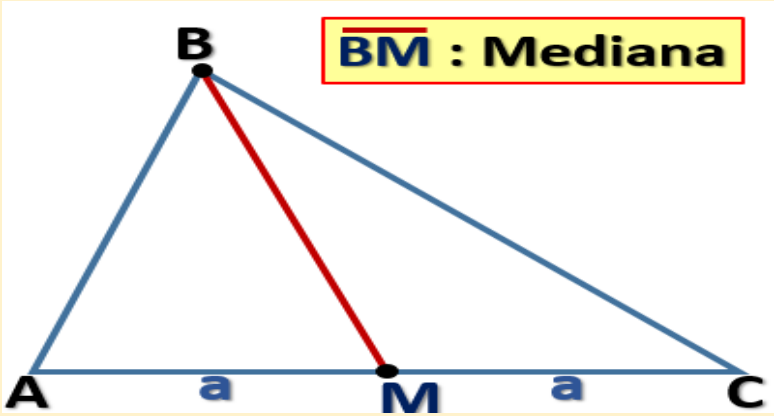
$x + 100° = 180°$

$x = 80°$

7. Si $\overline{BM}$ es la mediana relativa $\overline{AC}$. Hallar el valor de x



RECORDEMOS



$AM = MC$

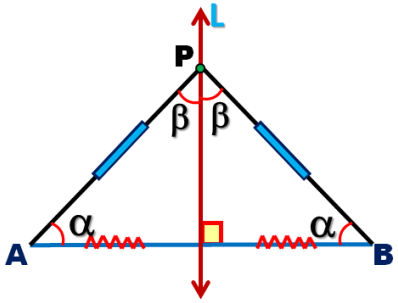
$2x - 6 = 18 - x$

$3x = 24$

$x = 8$

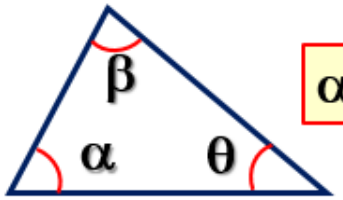
8. Si $\overleftrightarrow{\mathcal{L}}$ es la mediatriz relativa $\overline{AC}$. Hallar el valor de x

$\bar{L}$: mediatriz de $\overline{AC}$



RECORDEMOS

Suma de ángulos internos:



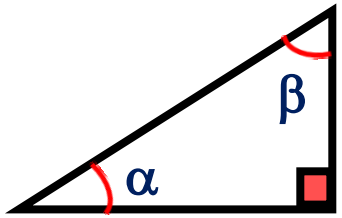
$\alpha + \beta + \theta = 180°$

En el ΔABC

$75° + 55° + m\measuredangle A = 180°$

$m\measuredangle A = 50°$

En el ΔAHP

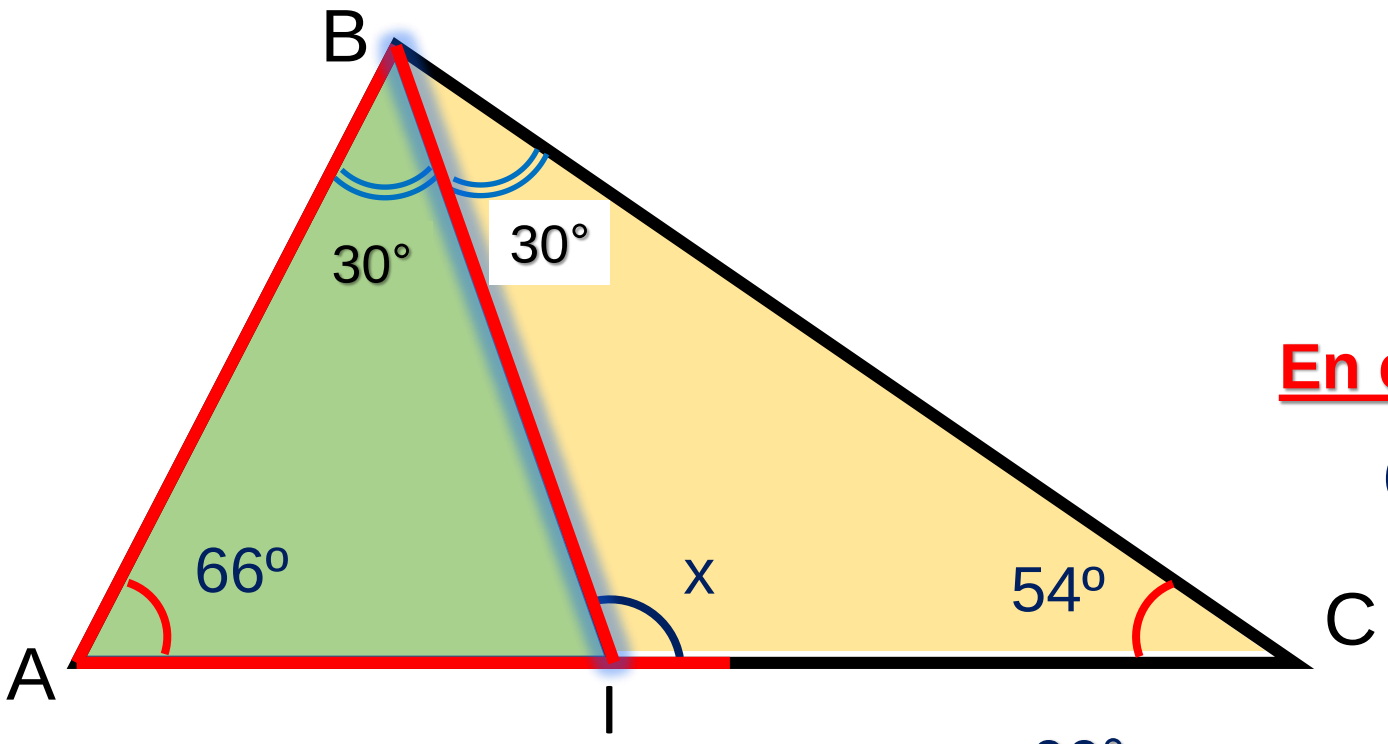


$a + b = 90°$

$50° + x = 90°$

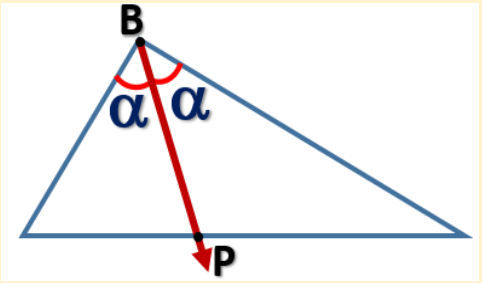
$x = 40°$

9. Si $\overline{BI}$ es bisectriz interior del triángulo ABC, halle el valor de x.



RECORDEMO

$\overrightarrow{BP}$: Bisectriz Interior

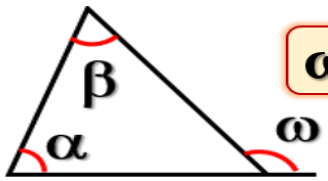


En el ΔABC

$66° + 2\propto + 54° = 180°$

$\propto = 30°$

En el ΔABI



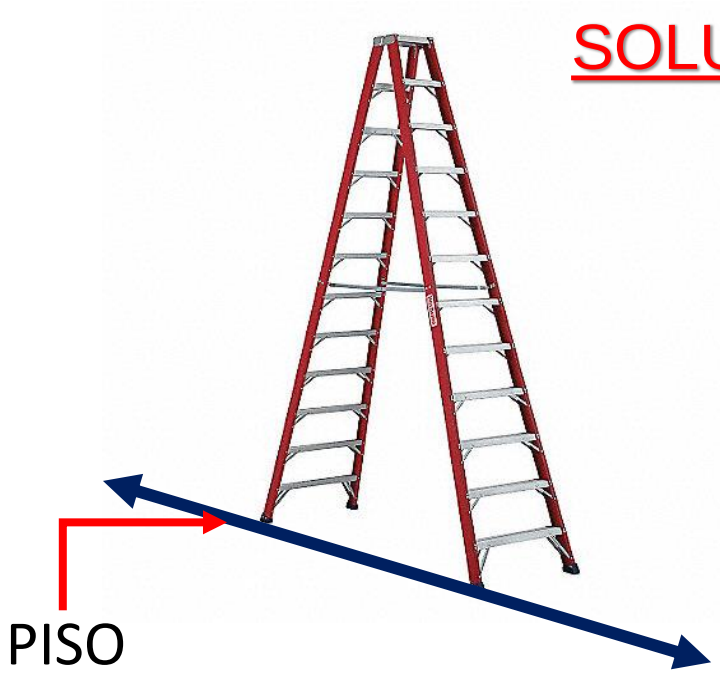
$\omega = \alpha + \beta$

$66° + \propto = x$

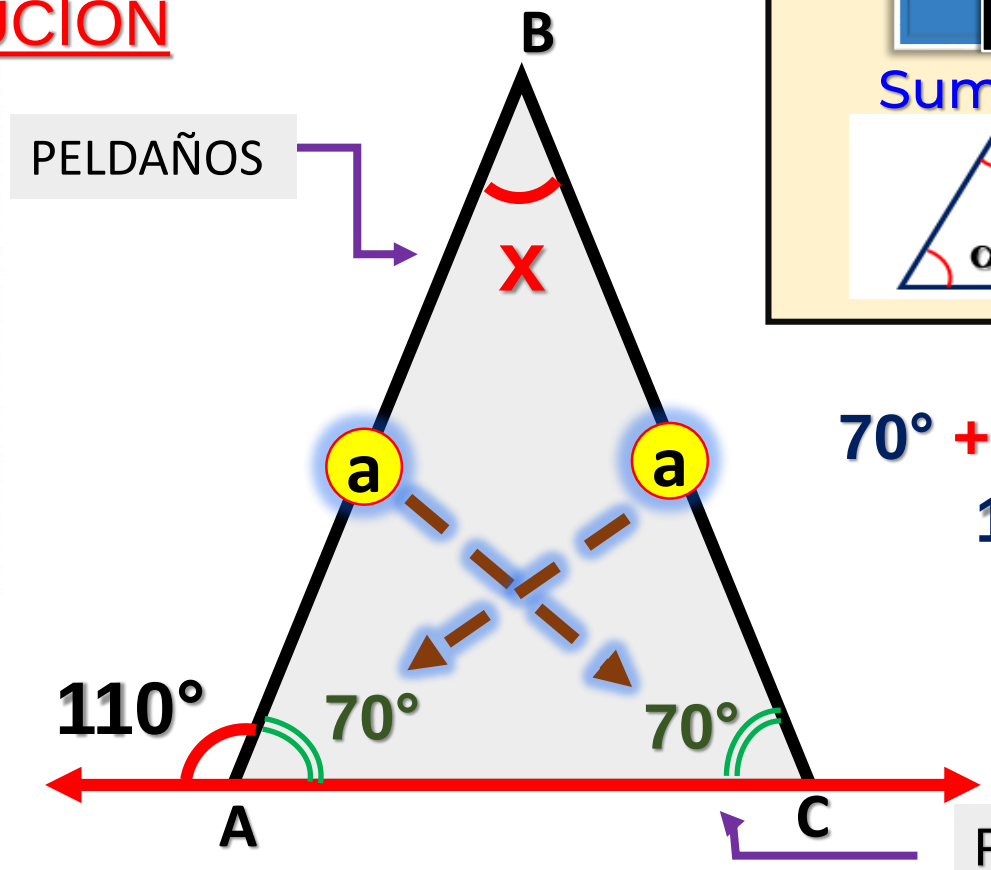
$66° + 30° = x$

$x = 96°$

10. En la figura se muestra una escalera doble pie, si el ángulo exterior de la base mide 110°, halle el ángulo que mide en la parte superior entre ambos peldaños.

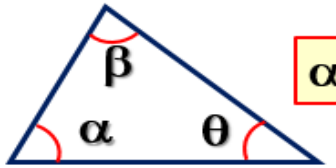


SOLUCIÓN



RECORDEMOS

Suma de ángulos internos:



$\alpha + \beta + \theta = 180°$

$70° + 70° + x = 180°$

$140° + x = 180°$

$x = 40°$