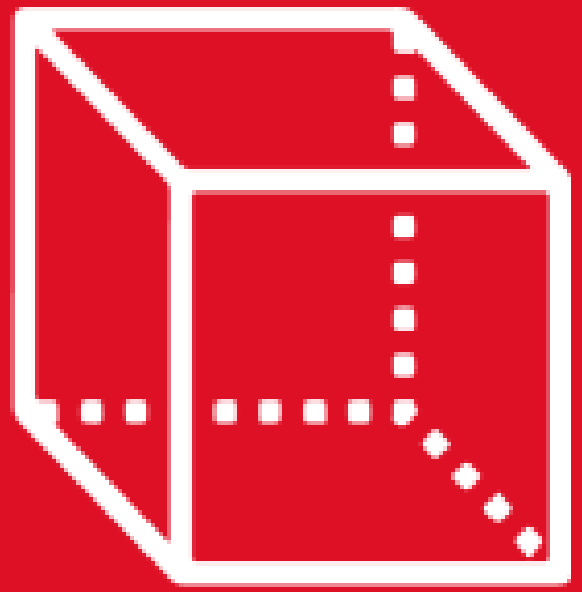
GEOMETRÍA

Capítulo 4

Sesión 2



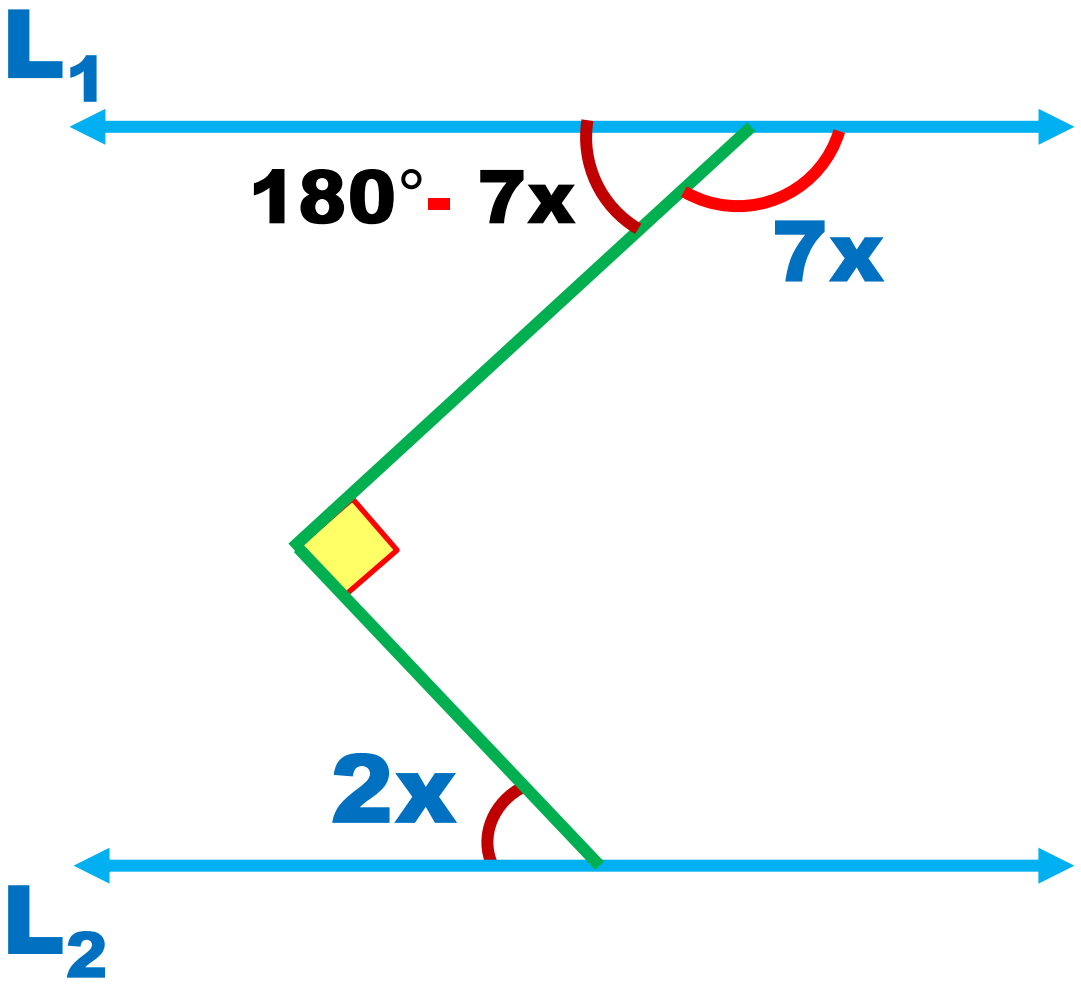
3th

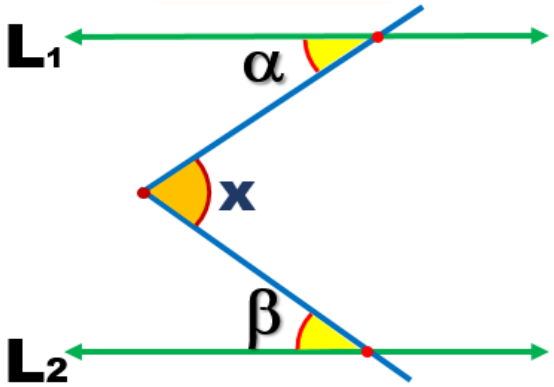
SECONDARY

SEGMENTO DE RECTA

SACO OLIVEROS

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





$\alpha + \beta = x$

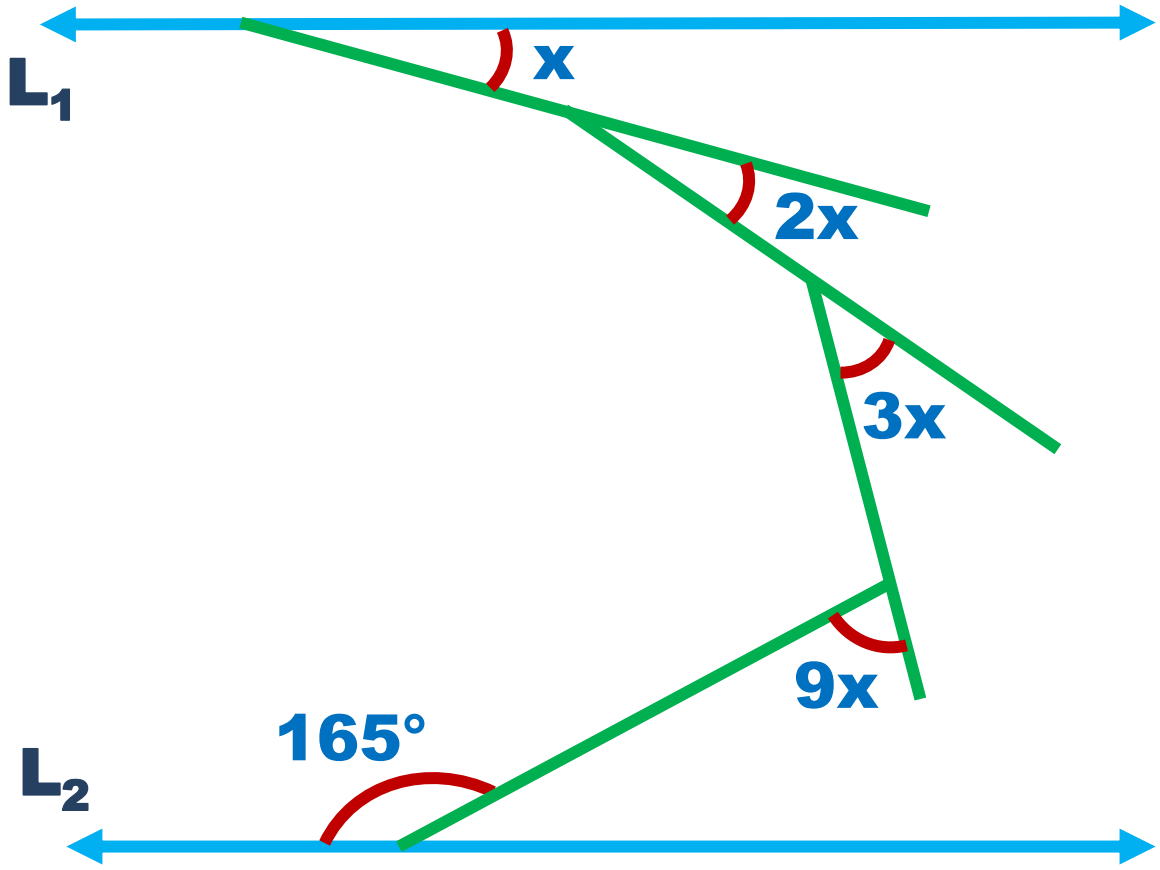
$180° - 7x + 2x = 90°$

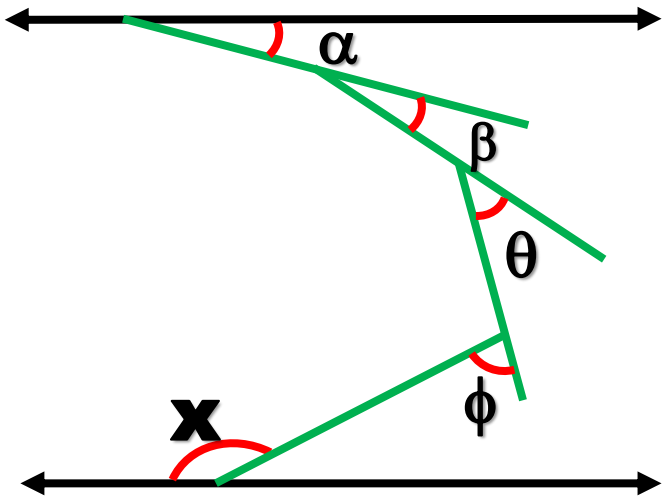
$180° - 5x = 90°$

$90° = 5x$

$x = 18°$

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





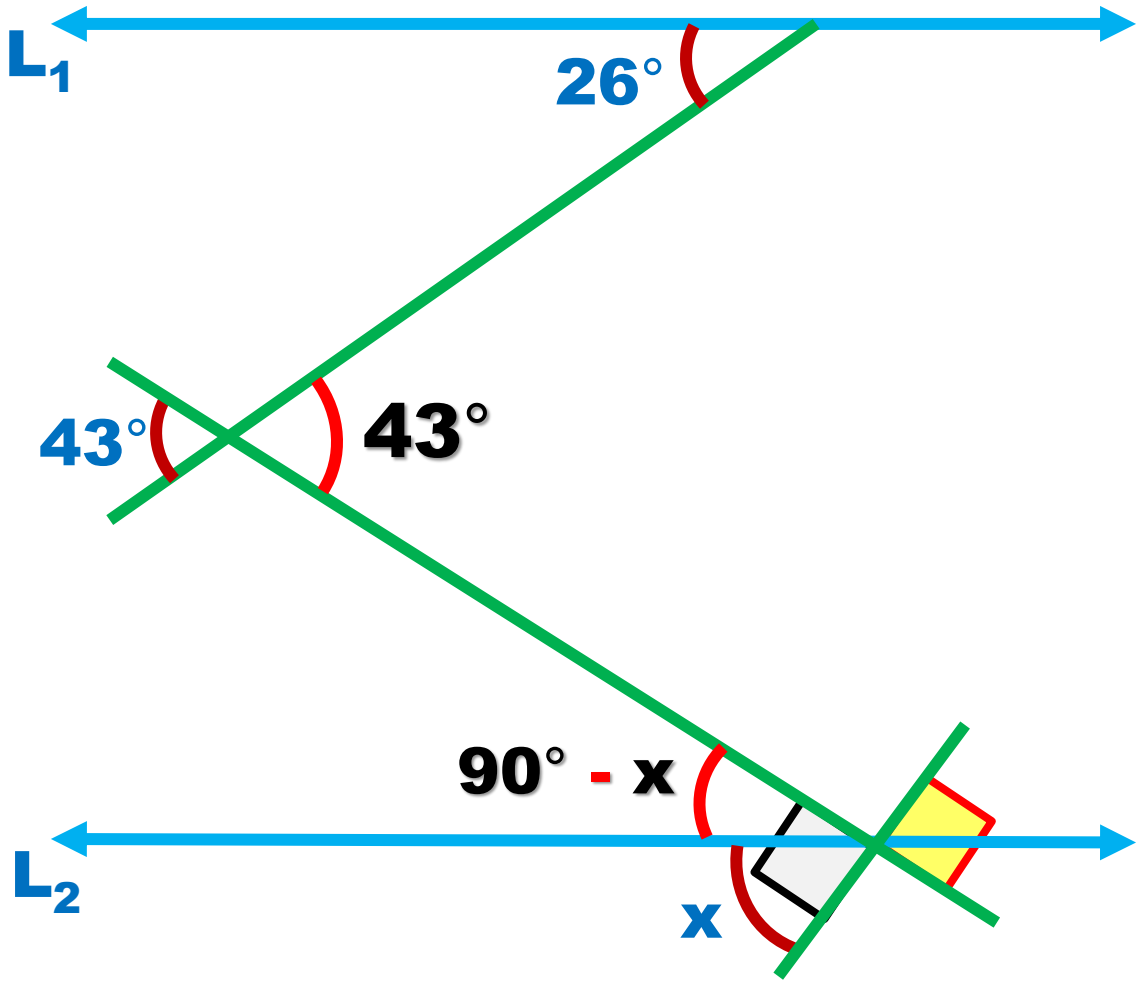
$$x = \alpha + \beta + \theta + \phi$$

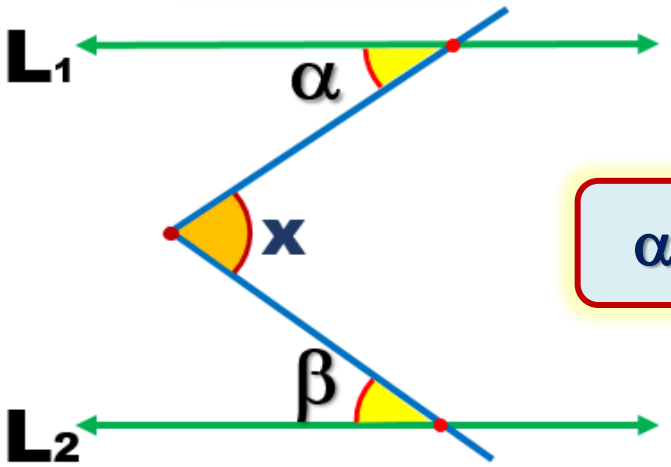
$$165° = x + 2x + 3x + 9x$$

$$165° = 15x$$

$$x = 11°$$

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





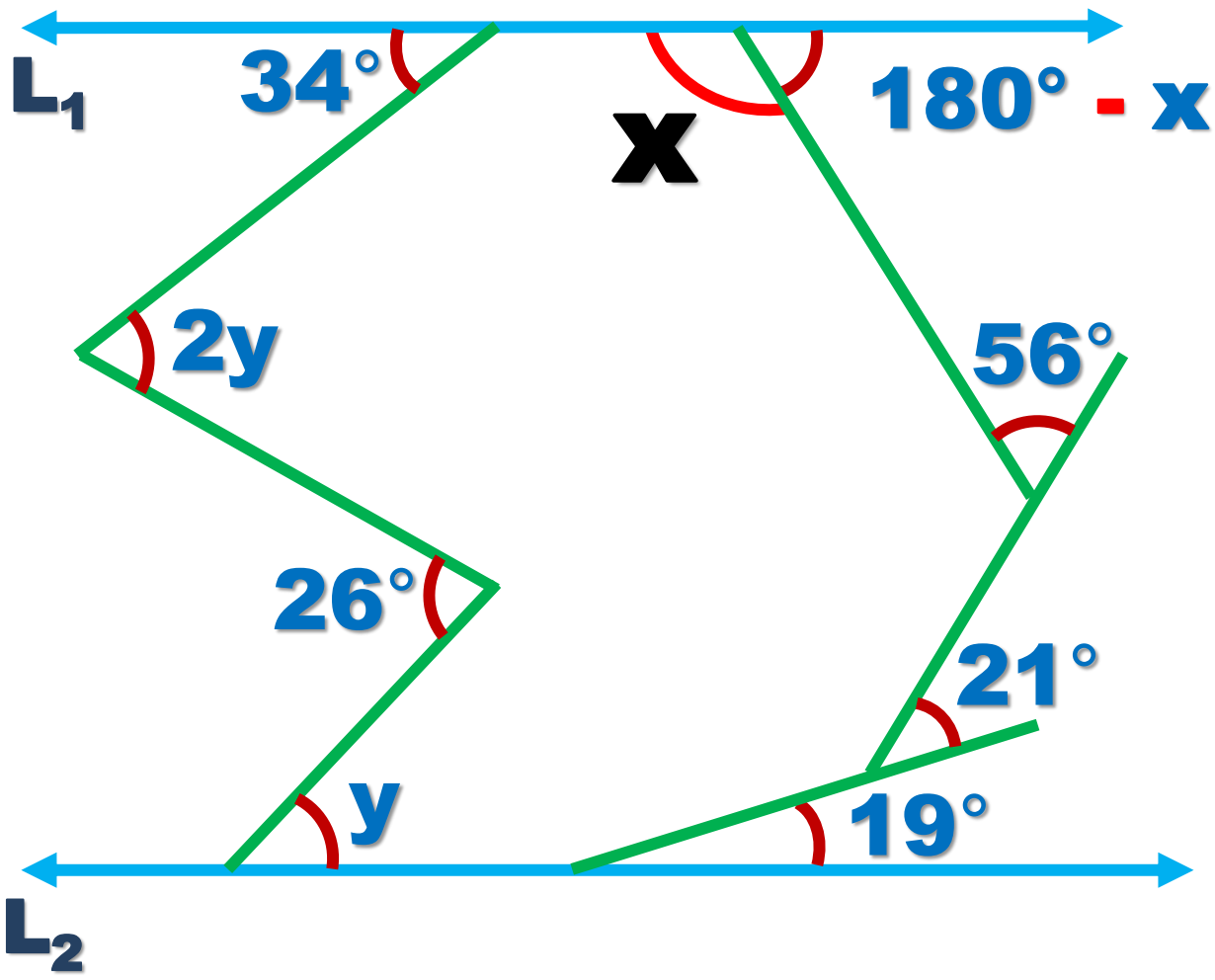
$\alpha + \beta = x$

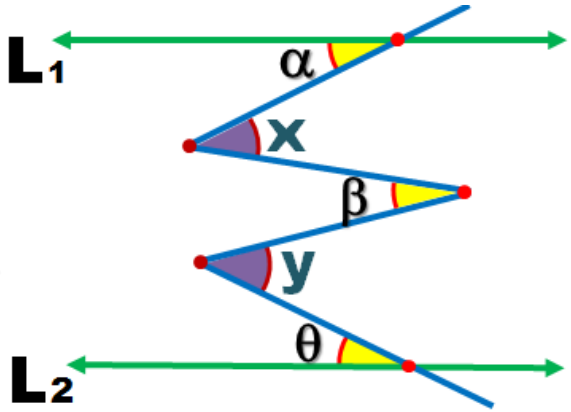
$26° + 90° - x = 43°$

$116° - x = 43°$

$x = 73°$

4. Si $\overleftrightarrow{L_1} \parallel \overleftrightarrow{L_2}$, halle el valor de x + y.



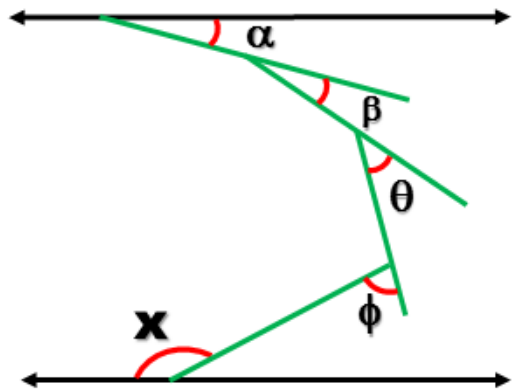


$2y+y = 34°+26°$

$3y = 60°$

$y = 20°$

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



$x = 19°+21°+56°$

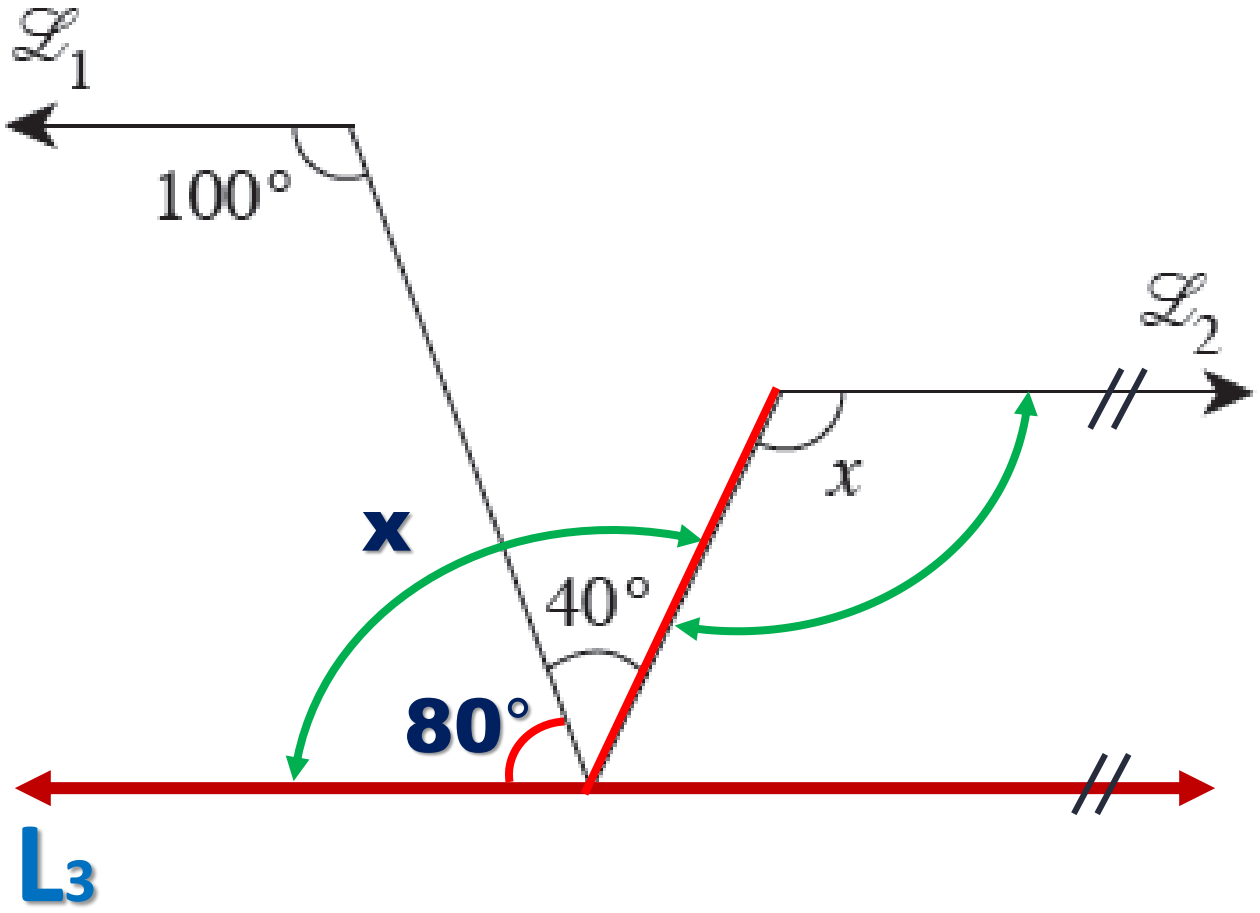
$x = 96°$

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

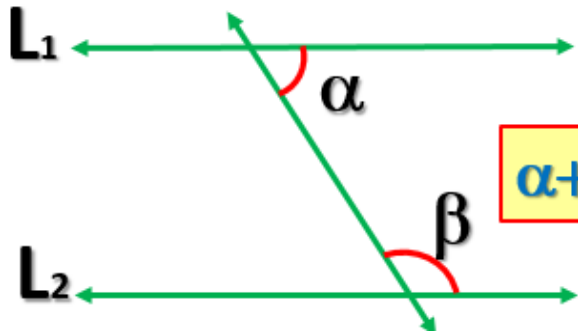
$x + y = 116°$

PROBLEMA 5

Si $\overleftrightarrow{L1}$ // $\overleftrightarrow{L2}$, halle el valor de *x*.

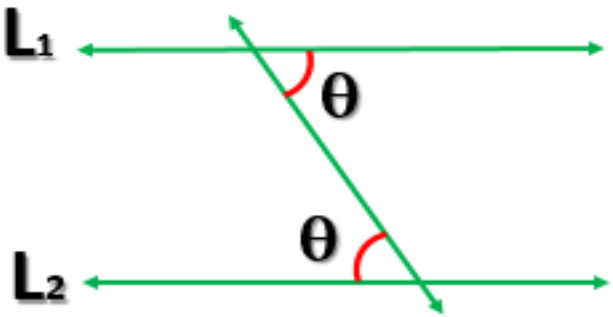


Ángulos conjugados



$\alpha+\beta=180°$

Ángulos alternos internos

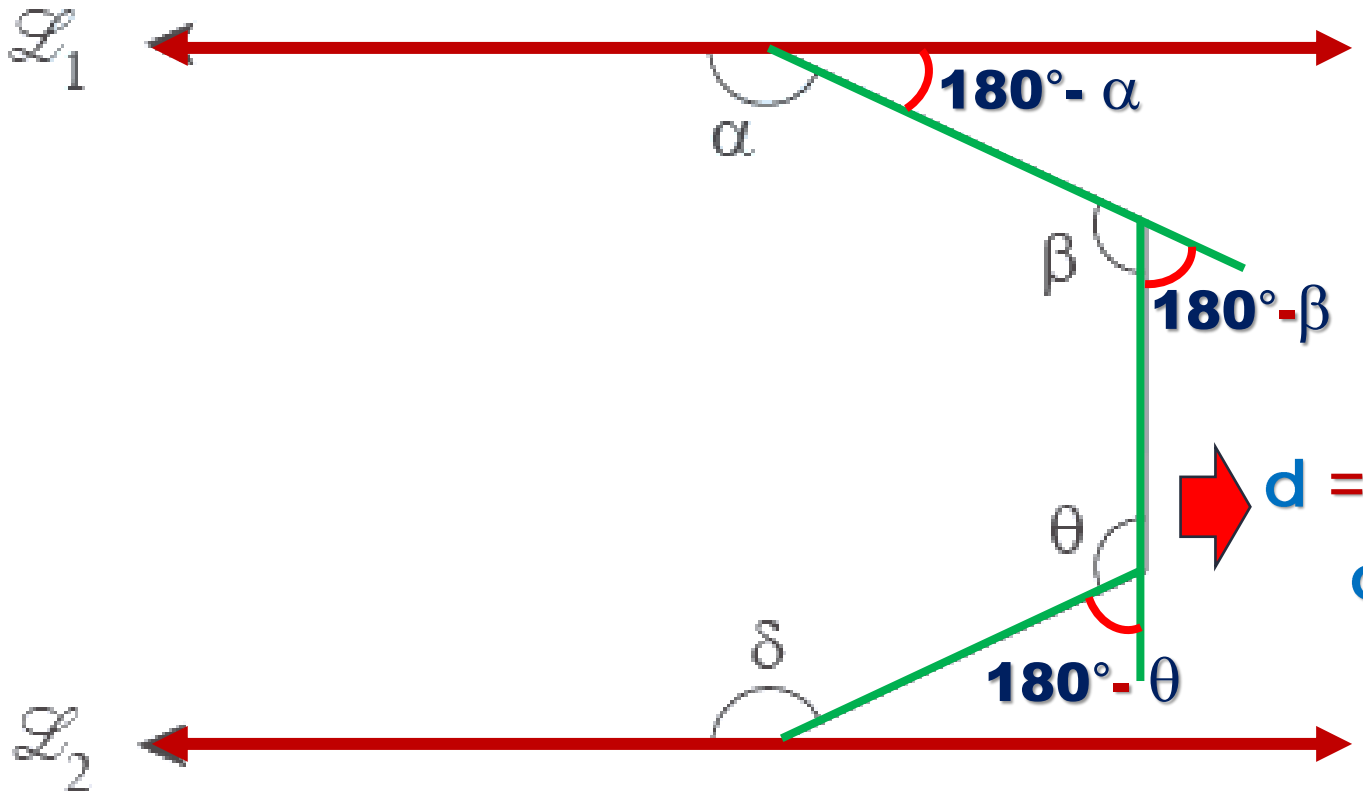


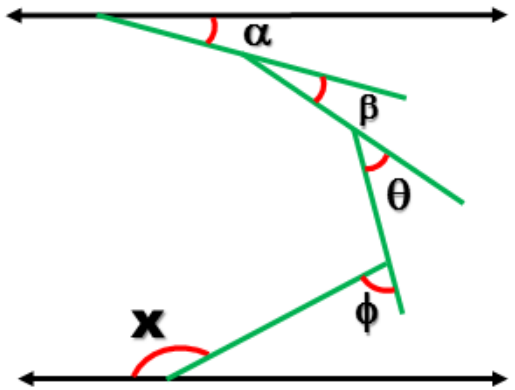
$x = 80° + 40°$

$x = 120°$

PROBLEMA 6

Si $\overleftrightarrow{L1} \parallel \overleftrightarrow{L2}$, halle el valor de a + b + q + d.





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

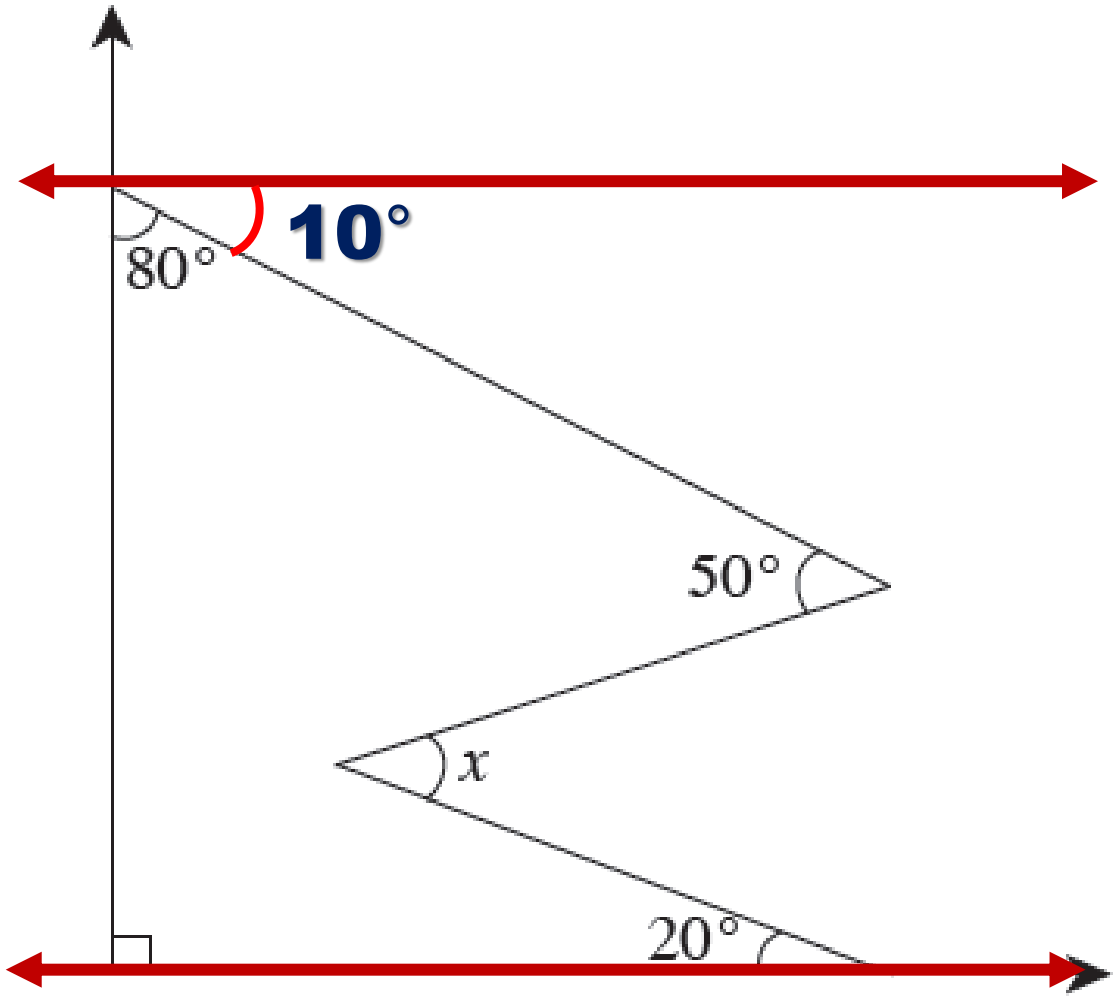
$d = 180° - a + 180° - b + 180° - q$

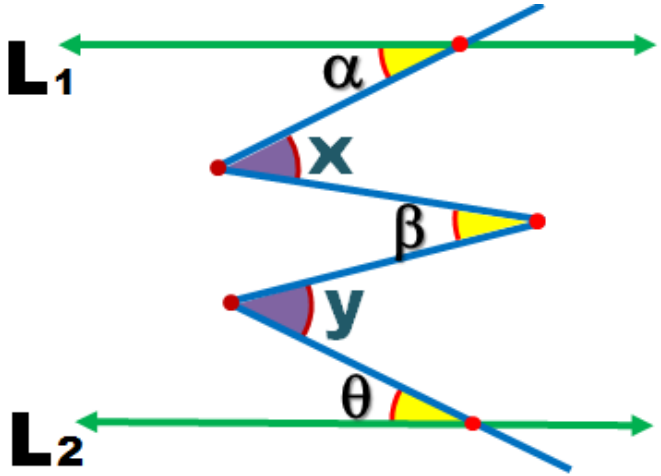
$d + a + b + q = 180° + 180° + 180°$

$\delta + \alpha + \beta + \theta = 540°$

PROBLEMA 7

Halle el valor de x.





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

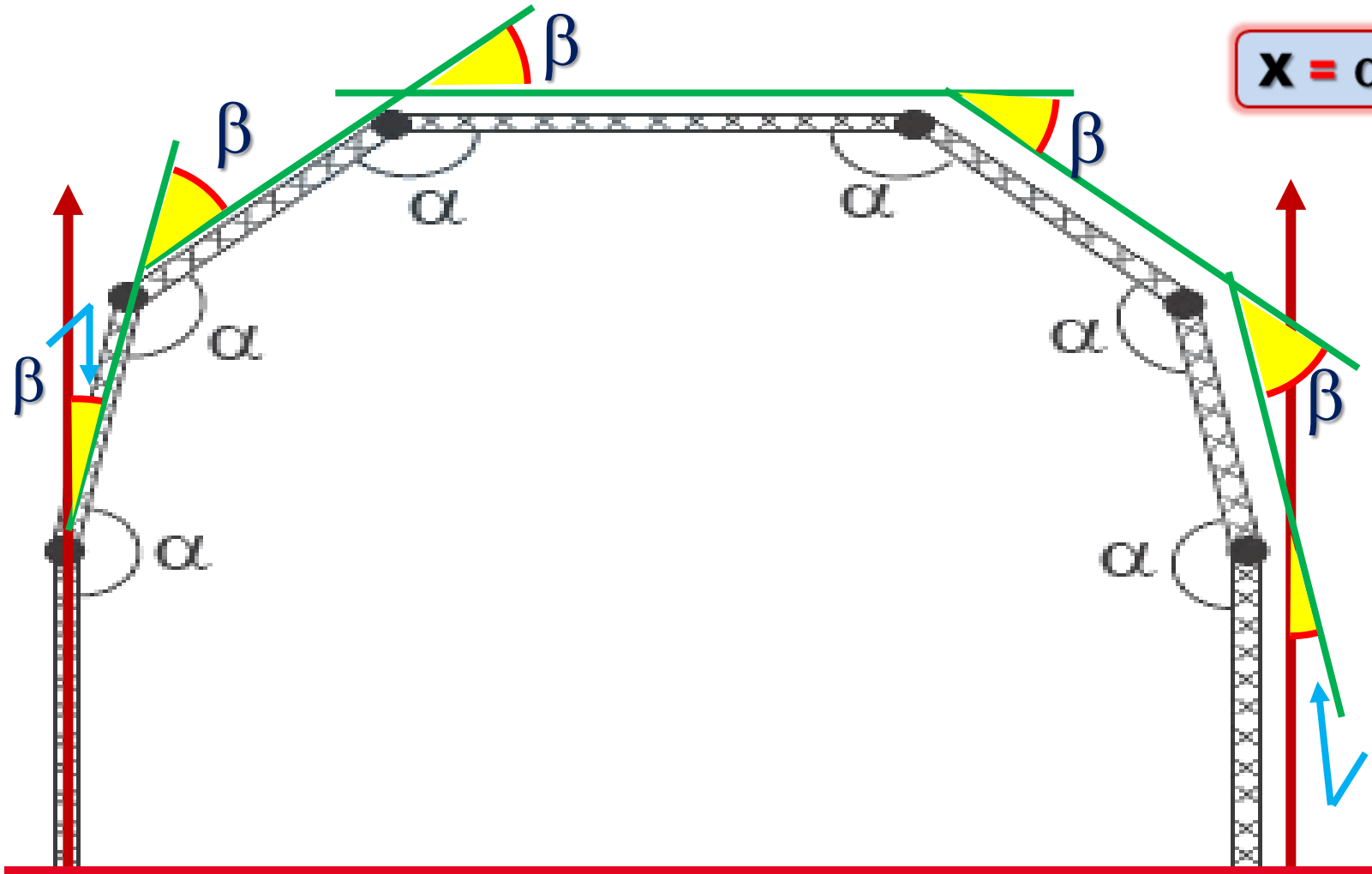
$$x + 10° = 50° + 20°$$

$$x + 10° = 70°$$

$$x = 60°$$

PROBLEMA 8

La figura representa el corte transversal de la estructura del techo de un depósito de mercancías. Halle el valor de a para construir dicho techo.



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

- $a = b + b + b + b + b$

  $a = 5b$

- $\beta + \alpha = 180°$

5β

$6b = 180°$

$\beta = 30°$

Nos piden

$\alpha = 5(\beta)30°$

$\alpha = 150°$


SACO
OLIVEROS