

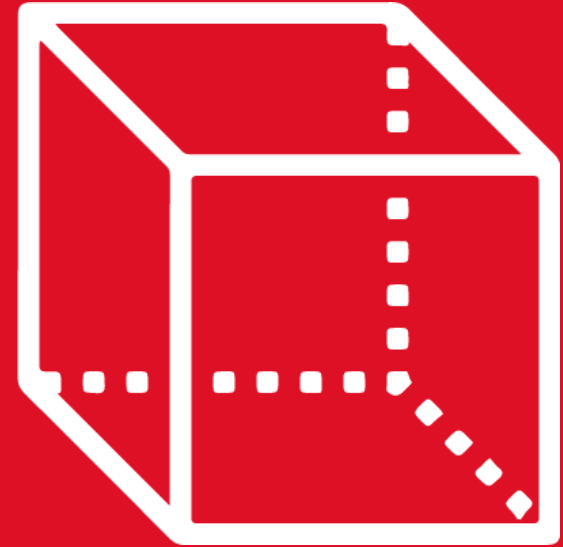


GEOMETRÍA

1st

SECONDARY

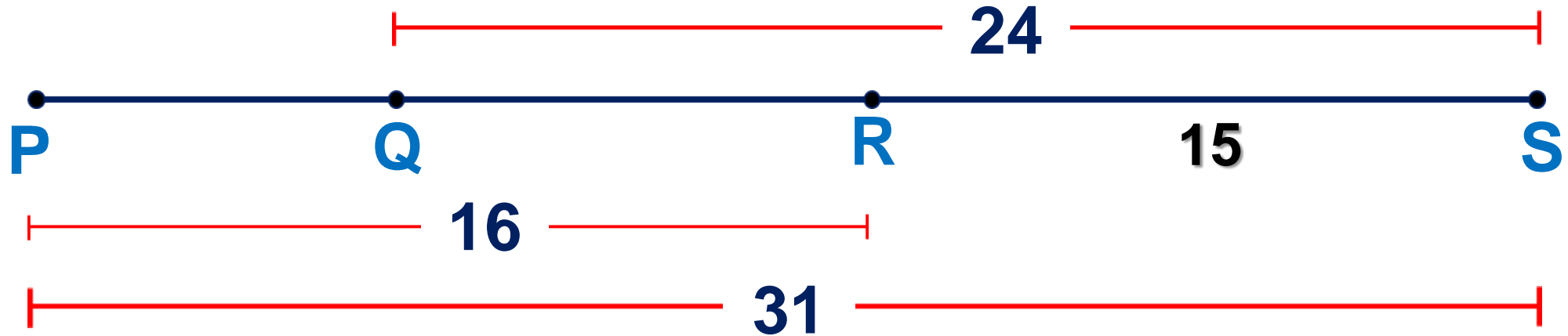
RETROALIMENTACIÓN



 **SACO OLIVEROS**



1. Considerando los datos de la figura mostrada, calcule QR.



Resolución

- Piden: QR
- Aplicando la adición de segmentos:
- Del gráfico tenemos:

$$PS = PR + RS$$

$$31 = 16 + RS$$

$$RS = 15$$

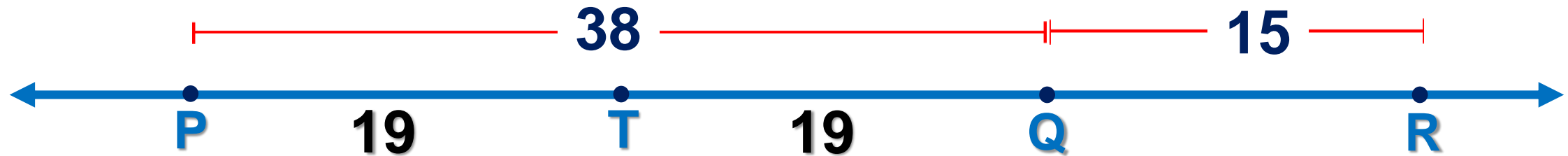
$$QS = QR + RS$$

$$24 = QR + 15$$

$$QR = 9 \text{ u}$$



2. En la figura, T es punto medio de \overline{PQ} , halle TR.



Resolución

- Piden: TR
 - Si T es punto medio de \overline{PQ}
→ $PT = TQ = 19$

- Del gráfico:
 $TR = 19 + 15$

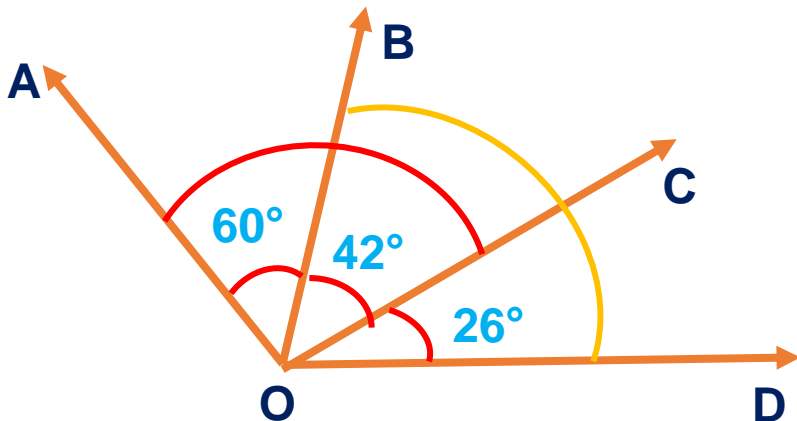
$$TR = 34u$$



3. Se tiene los rayos consecutivos OA, OB, OC y OD. Si $m\angle AOB = 60^\circ$, $m\angle BOC = 42^\circ$, $m\angle COD = 26^\circ$. Calcule $m\angle AOC + m\angle BOD$

Resolución

Graficamos y ubicamos los datos correspondientes



Nos piden

$$\begin{aligned} & \underbrace{m\angle AOC}_{60^\circ + 42^\circ} + \underbrace{m\angle BOD}_{42^\circ + 26^\circ} \\ & 102^\circ + 68^\circ \end{aligned}$$

RPTA: 170°



4. En la figura halle el valor de x , si \overrightarrow{OP} es bisectriz del $\angle BOC$

\overrightarrow{OP} es bisectriz del $\angle BOC$.

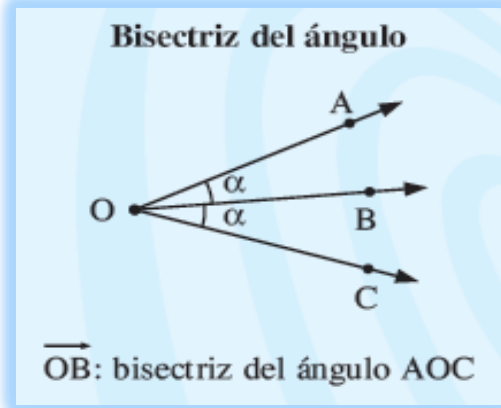
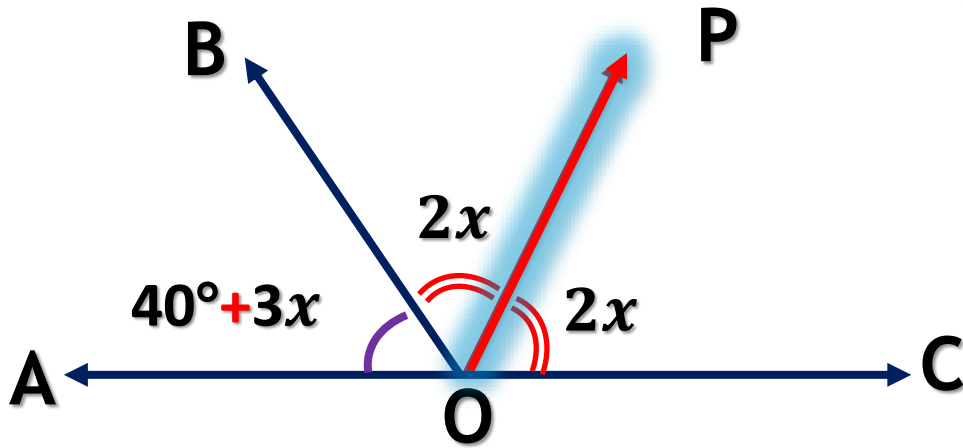
$\Rightarrow m \angle COP = m \angle BOP = 2x$

En la \overleftrightarrow{AC} .

$$40^\circ + 3x + 2x + 2x = 180^\circ$$

$$7x = 140^\circ$$

$$x = 20^\circ$$





5. Si el suplemento de $2x$ es igual al cuádruple del complemento de $3x$.
Halle el valor de x

$$\underbrace{S_{2x}} = 4 \cdot \underbrace{C_{3x}}$$

$$180^\circ - 2x = 4 \cdot (90 - 3x)$$

$$180^\circ - 2x = 360 - 12x$$

$$12x - 2x = 360 - 180^\circ$$

$$10x = 180^\circ$$

$$X = 18^\circ$$



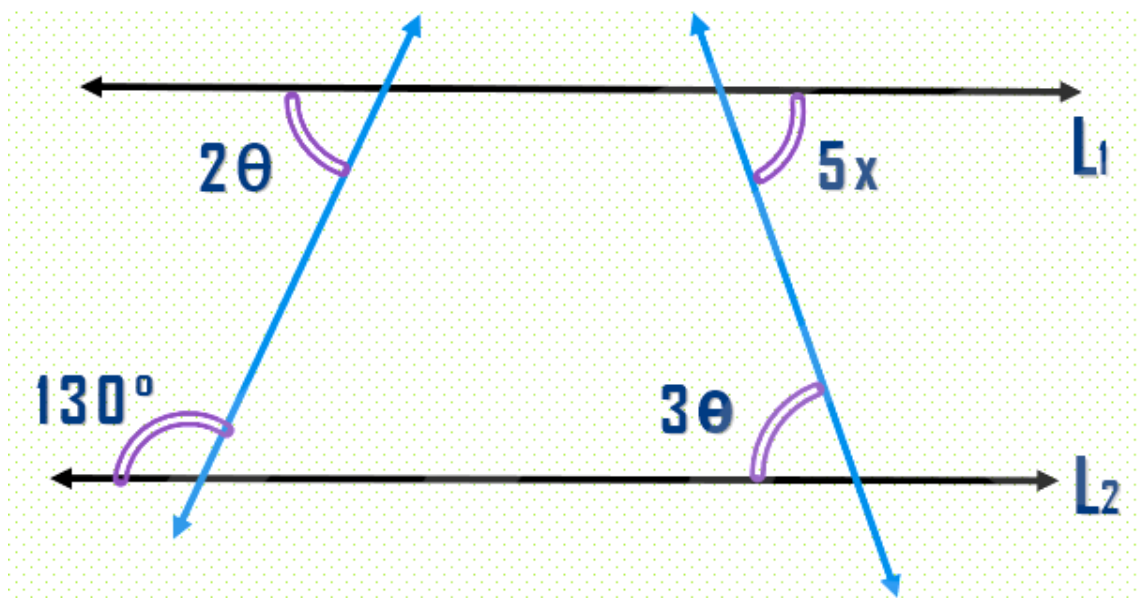
Suplemento (S)

$$S_\alpha = 180^\circ - \alpha$$

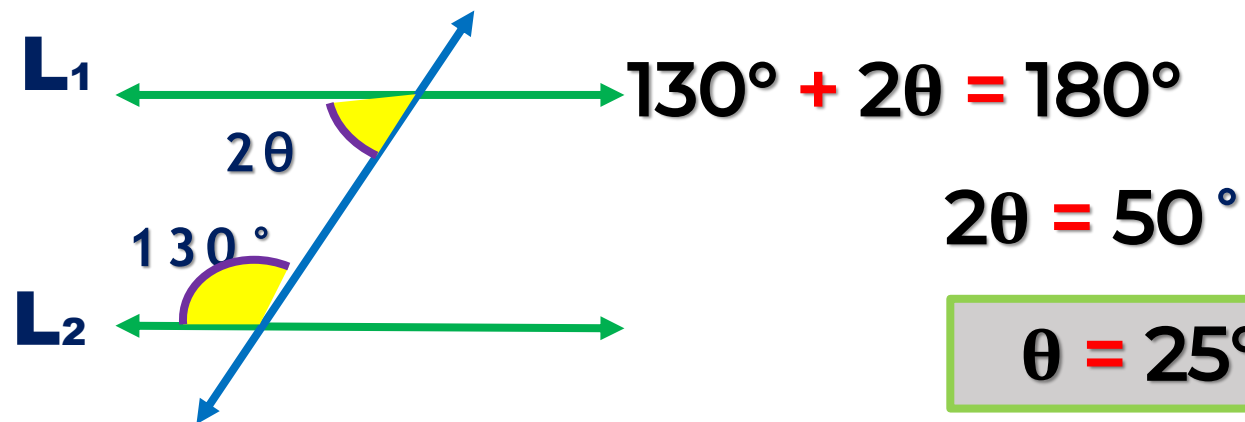
Complemento (C)

$$C_\alpha = 90^\circ - \alpha$$

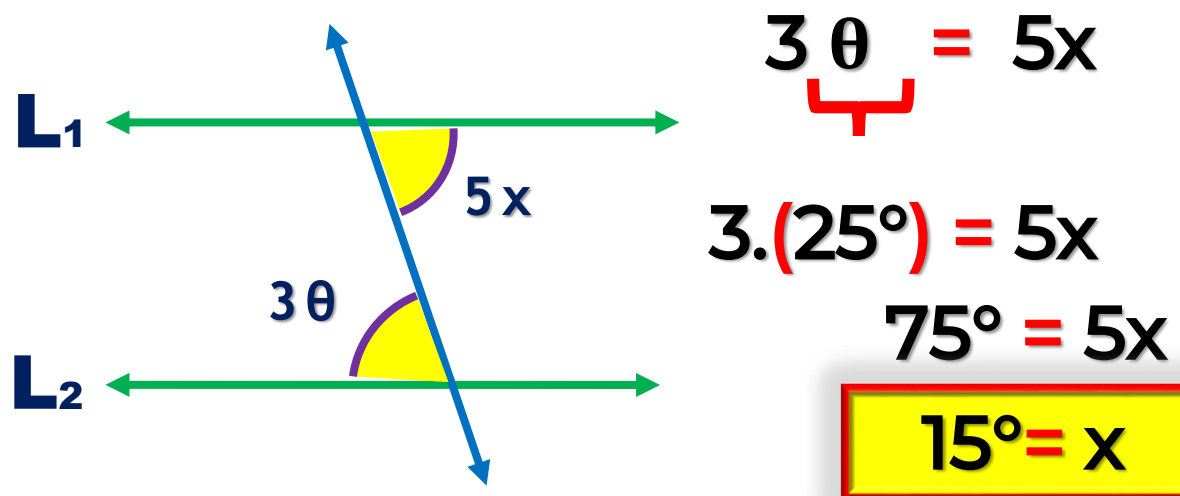
6. Si $L_1 \parallel L_2$, halle el valor de x.



Áng. conjugados

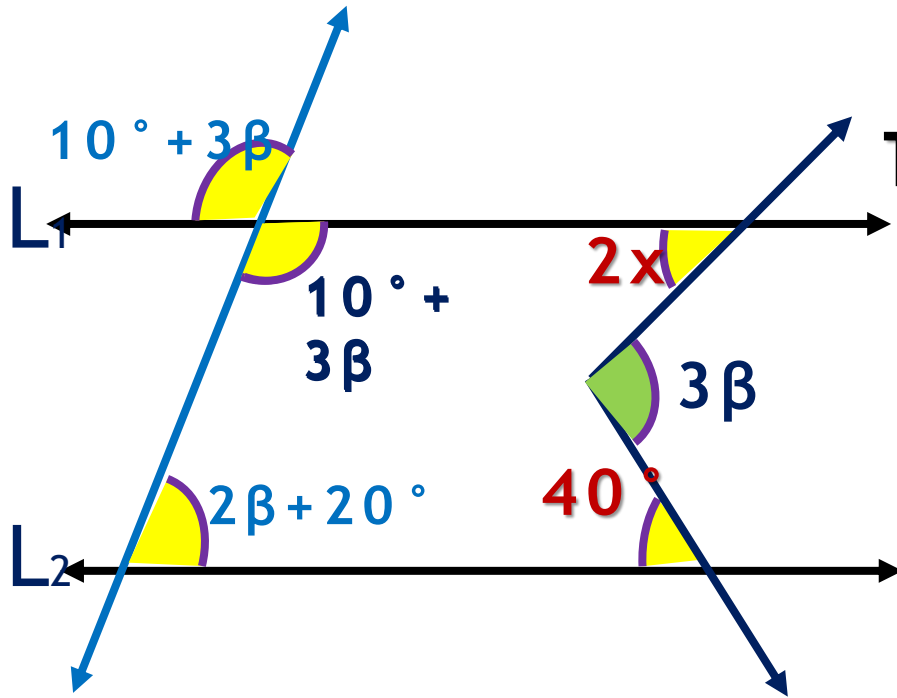


Áng. Alternos internos





7. Si $L_1 \parallel L_2$, halle el valor de x .



$$10^\circ + 3\beta + 2\beta + 20^\circ = 180^\circ$$

$$5\beta + 30^\circ = 180^\circ$$

$$5\beta = 150^\circ$$

$$\beta = 30^\circ$$

$$3\beta = 2x + 40^\circ$$

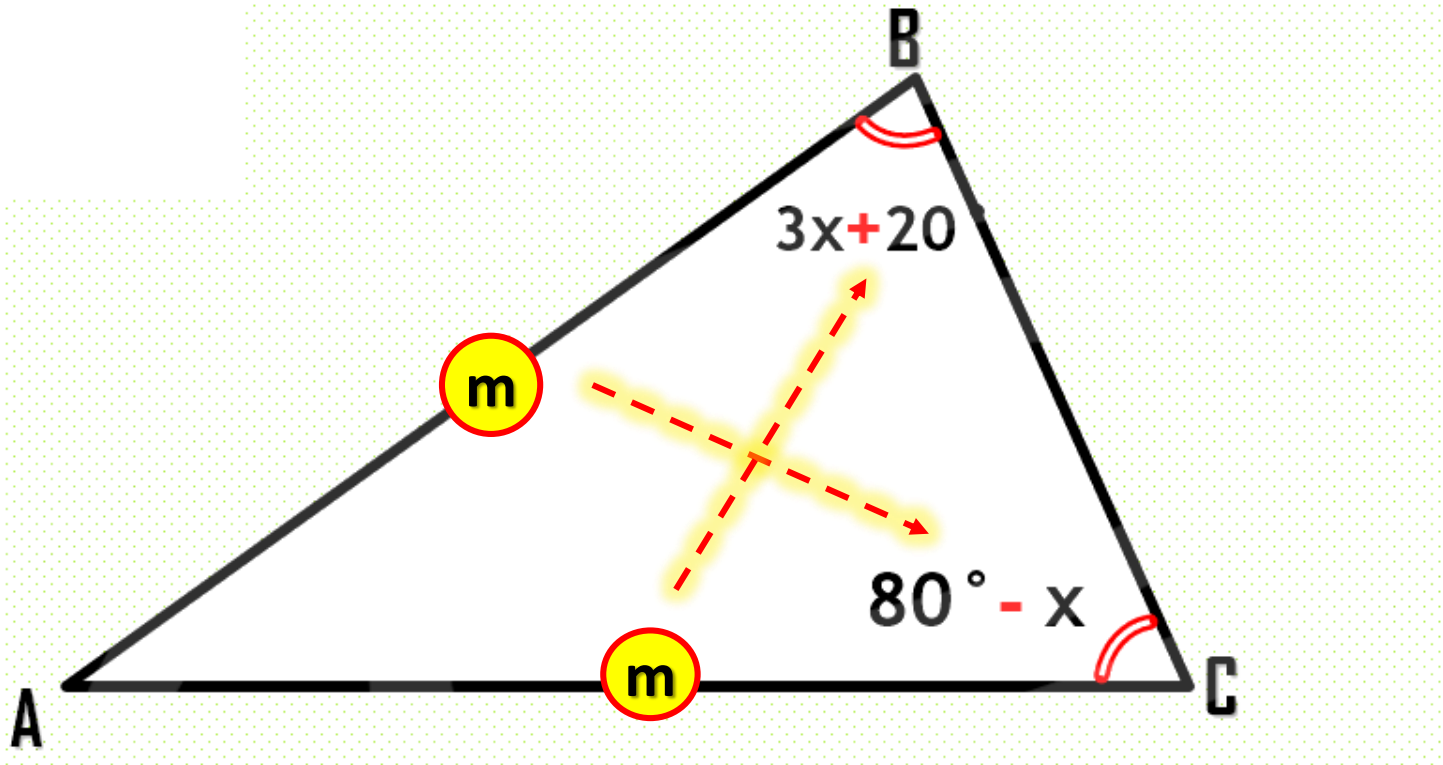
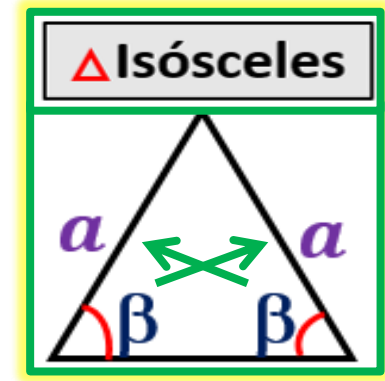
$$3(30^\circ) = 2x + 40^\circ$$

$$90^\circ = 2x + 40^\circ$$

$$50^\circ = 2x$$

$$25^\circ = x$$

8. En el gráfico $AB=AC$, halle el valor de x .



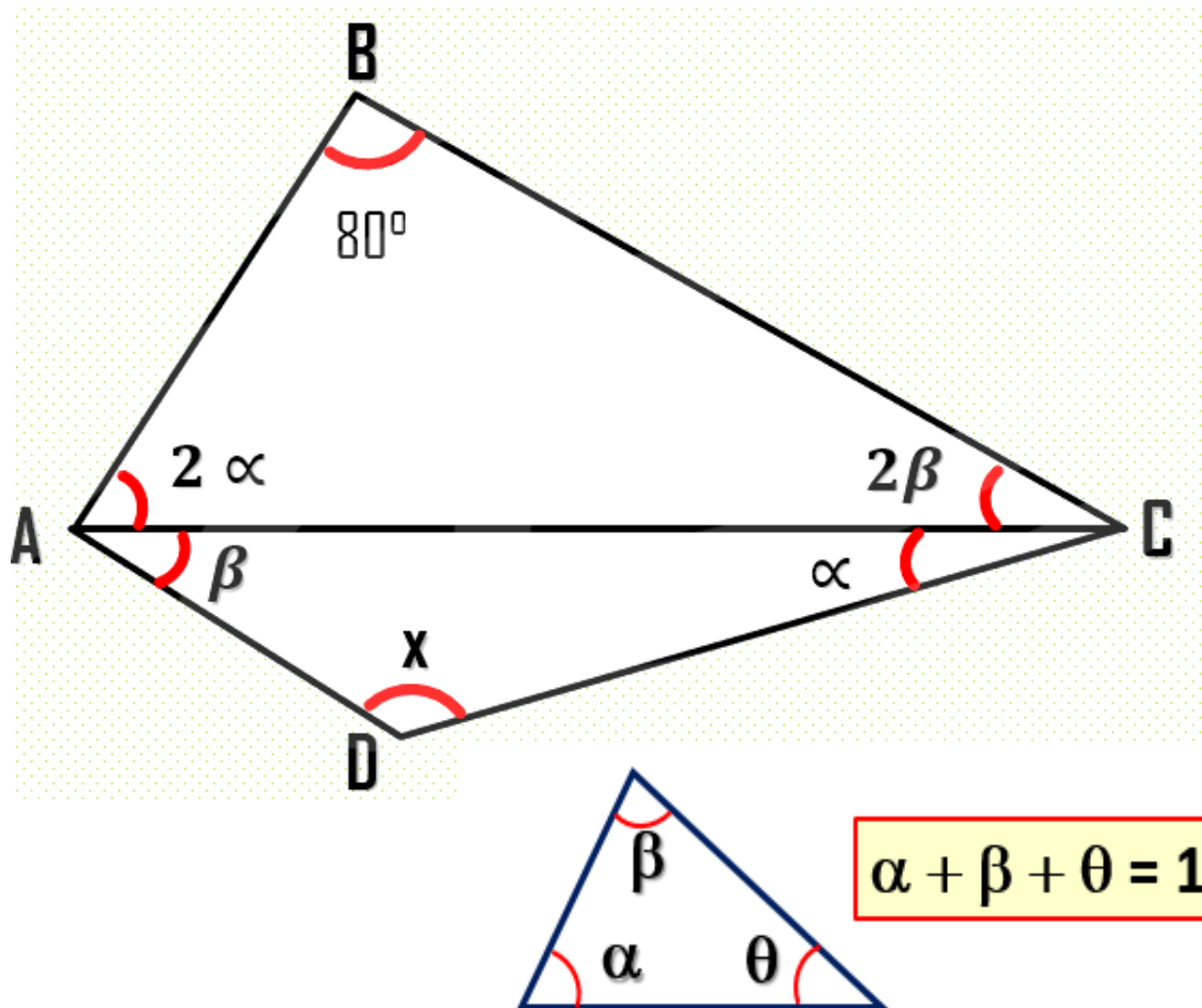
$$m \angle ABC = m \angle ACB$$

$$3x + 20^\circ = 80^\circ - x$$

$$4x = 60^\circ$$

$$x = 15^\circ$$

9. En el gráfico, halle el valor de x.



$$\alpha + \beta + \theta = 180^\circ$$

En el $\triangle ABC$

$$2\alpha + 2\beta + 80^\circ = 180^\circ$$

$$2\alpha + 2\beta = 100^\circ$$

$$\alpha + \beta = 50^\circ$$

En el $\triangle ADC$

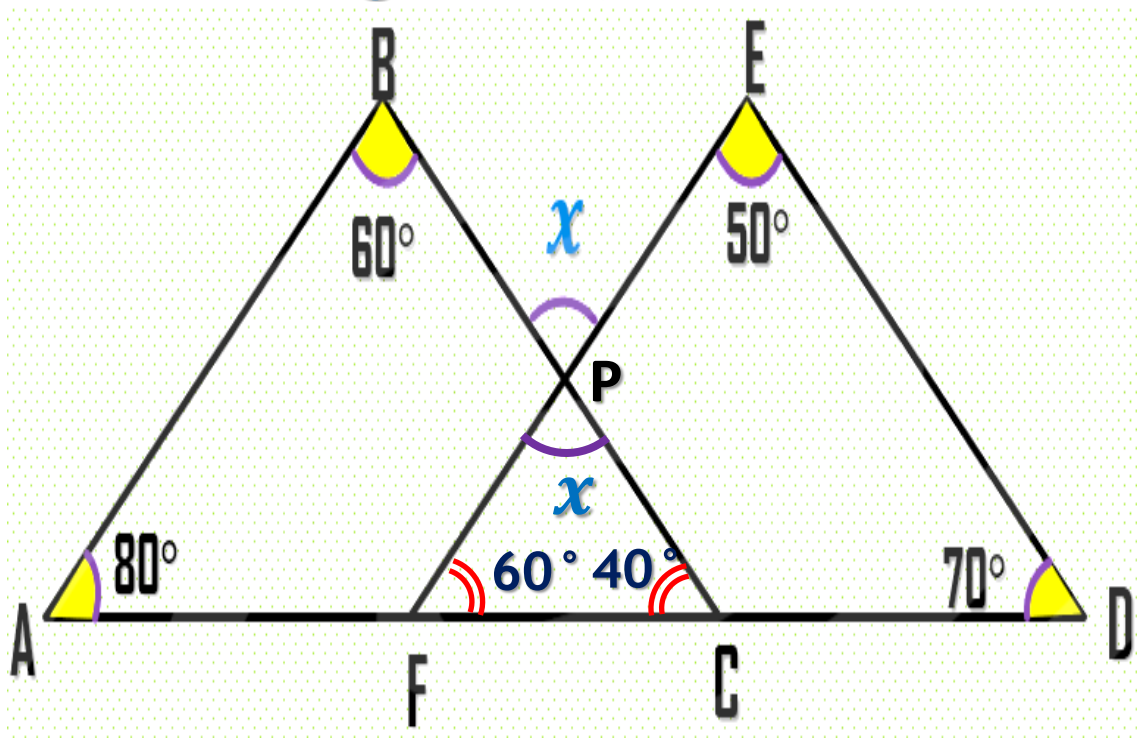
$$\alpha + \beta + x = 180^\circ$$

$$50^\circ + x = 180^\circ$$

$$x = 130^\circ$$



10. En el gráfico, halle el valor de x .



En ΔABC

$$80^\circ + 60^\circ + m \angle C = 180^\circ$$

$$140^\circ + m \angle C = 180^\circ$$

$$m \angle C = 40^\circ$$

En ΔEFD

$$50^\circ + 70^\circ + m \angle F = 180^\circ$$

$$120^\circ + m \angle F = 180^\circ$$

$$m \angle F = 60^\circ$$

En ΔFPC

$$60^\circ + 40^\circ + x = 180^\circ$$

$$100^\circ + x = 180^\circ$$

$$x = 80^\circ$$