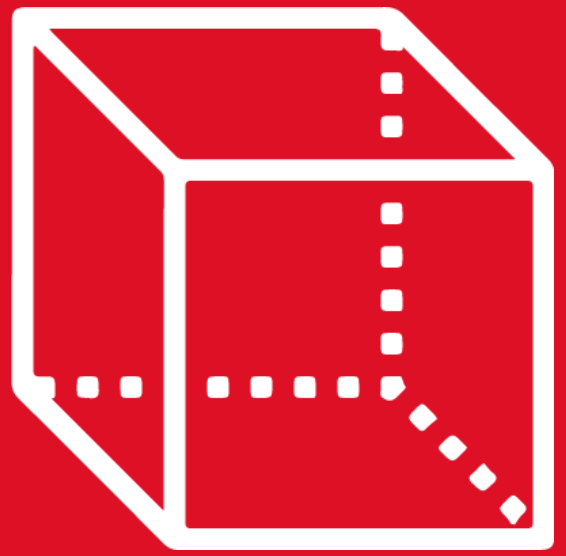
GEOMETRÍA

Tomo 3



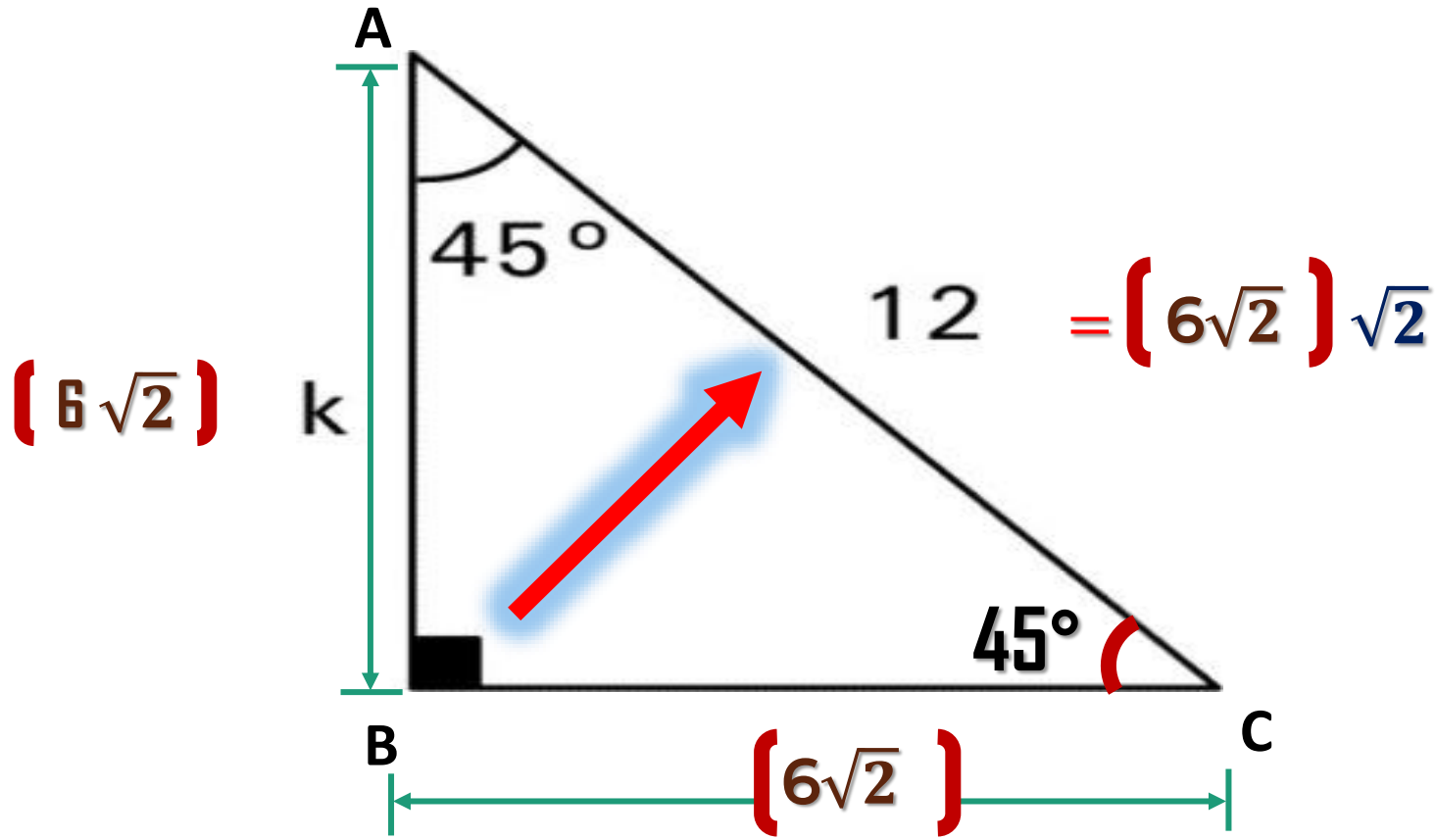
1st

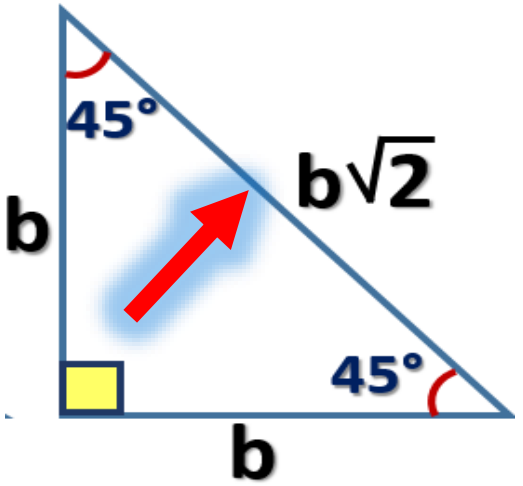
SECONDARY

Retroalimentación

SACO OLIVEROS

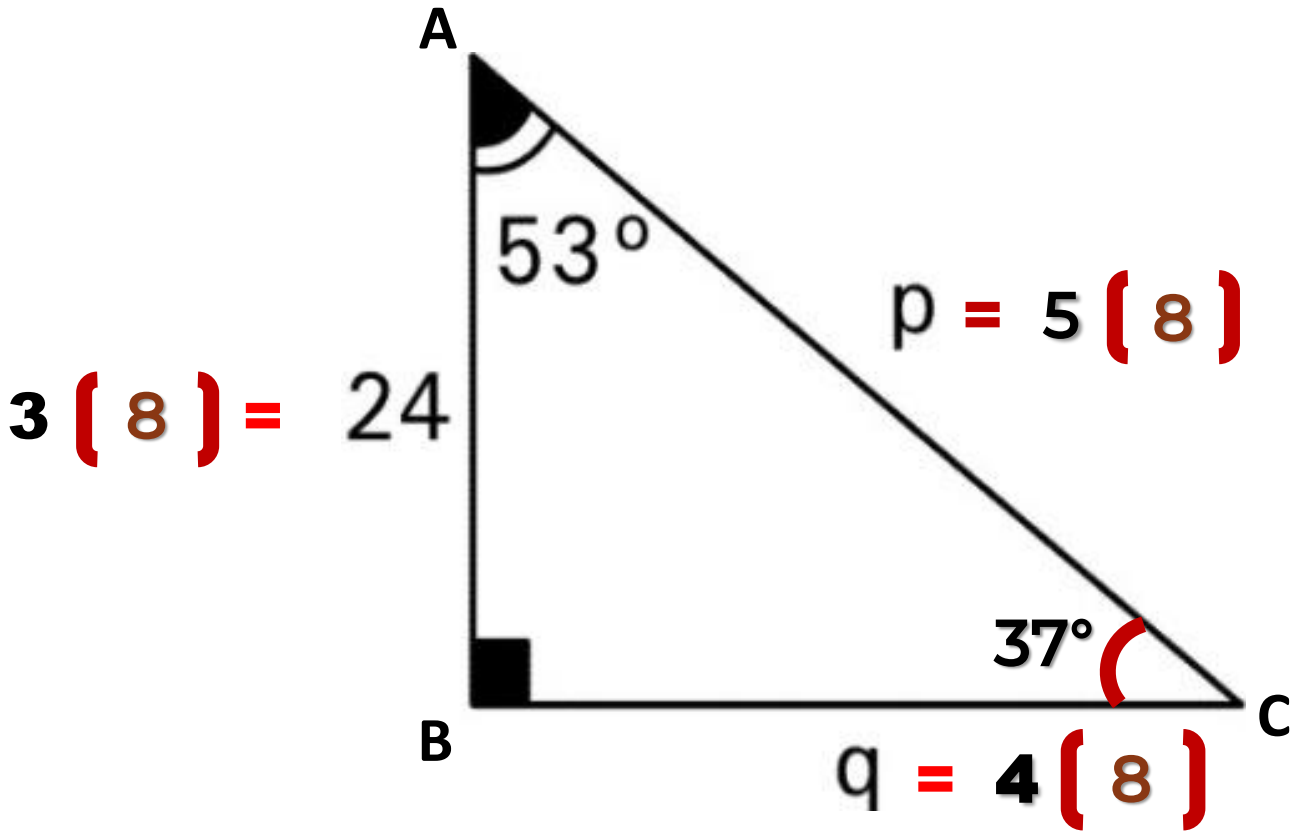
1. Halle el valor de k

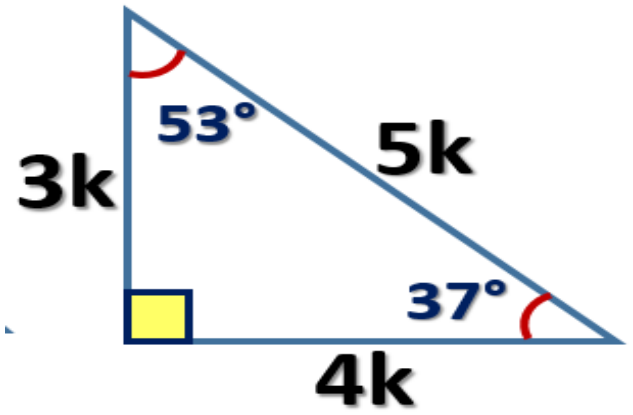




$k = 6\sqrt{2}$

2. Halle el valor de p + q



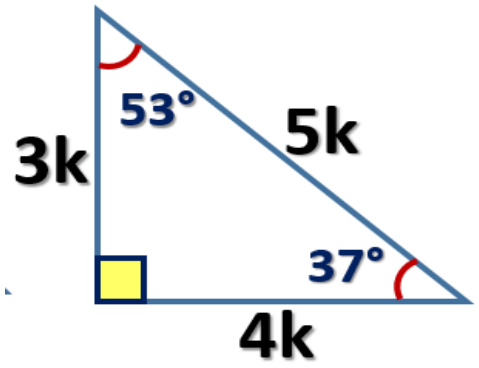


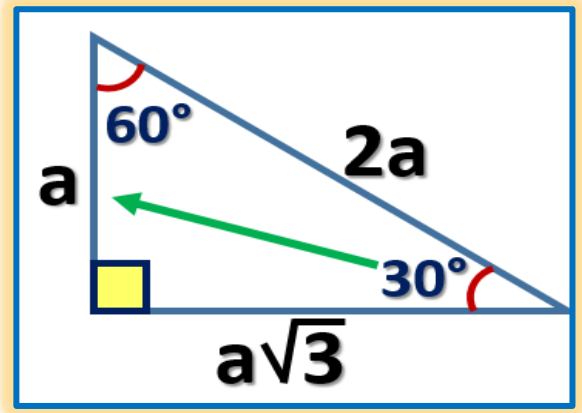
p = 5(8) = 40

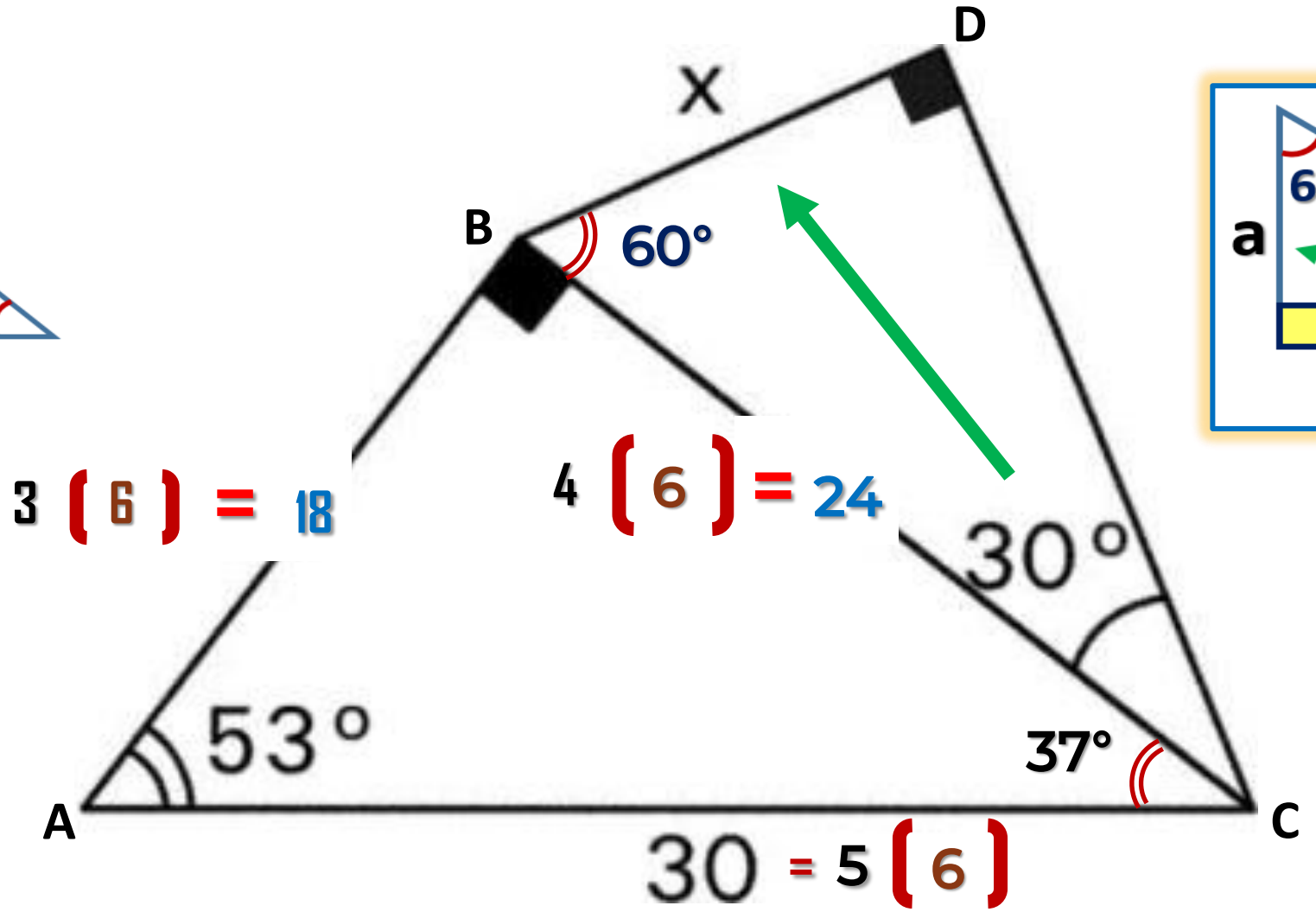
q = 4(8) = 32

p + q = 72

3. Halle el valor de x





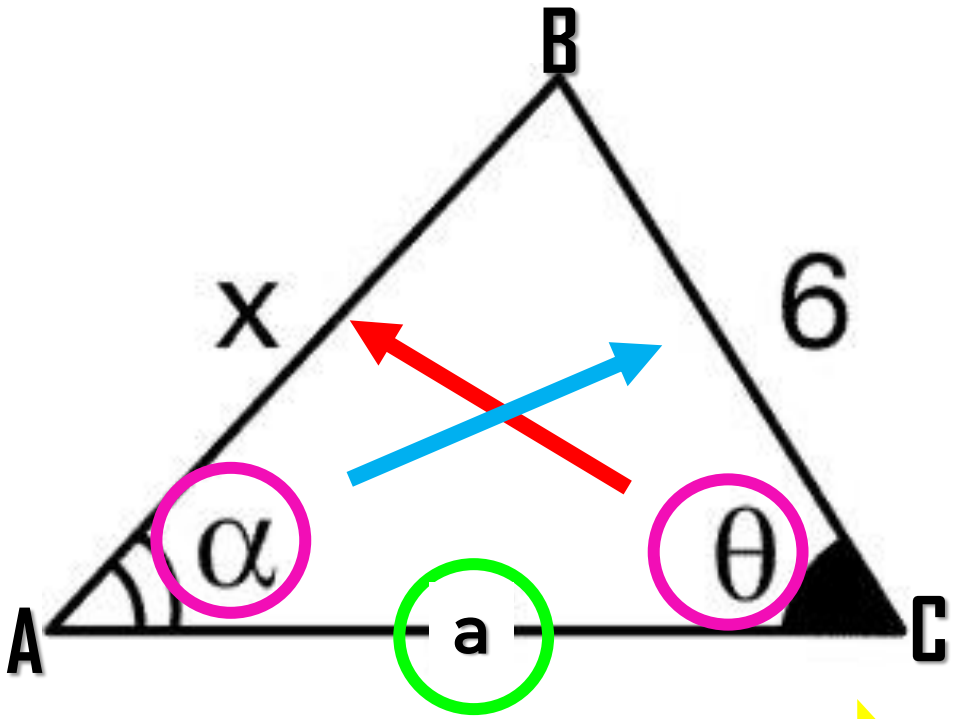


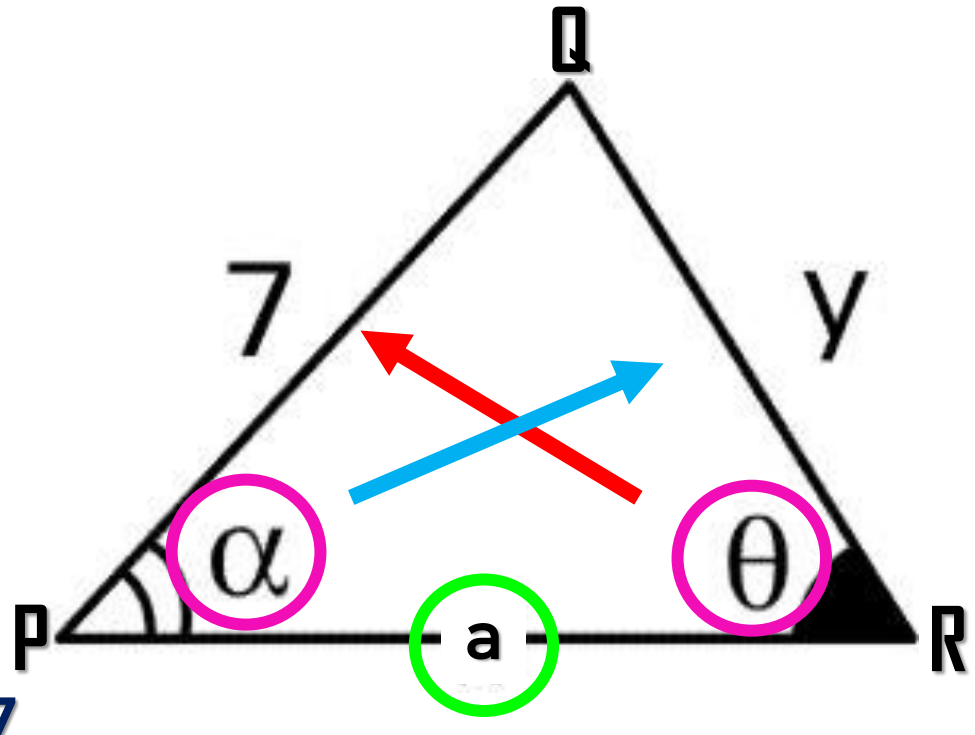
x = 12

4. Halle el valor de x + y

$\triangle ABC \cong \triangle PQR$

CASO (A-L-A)



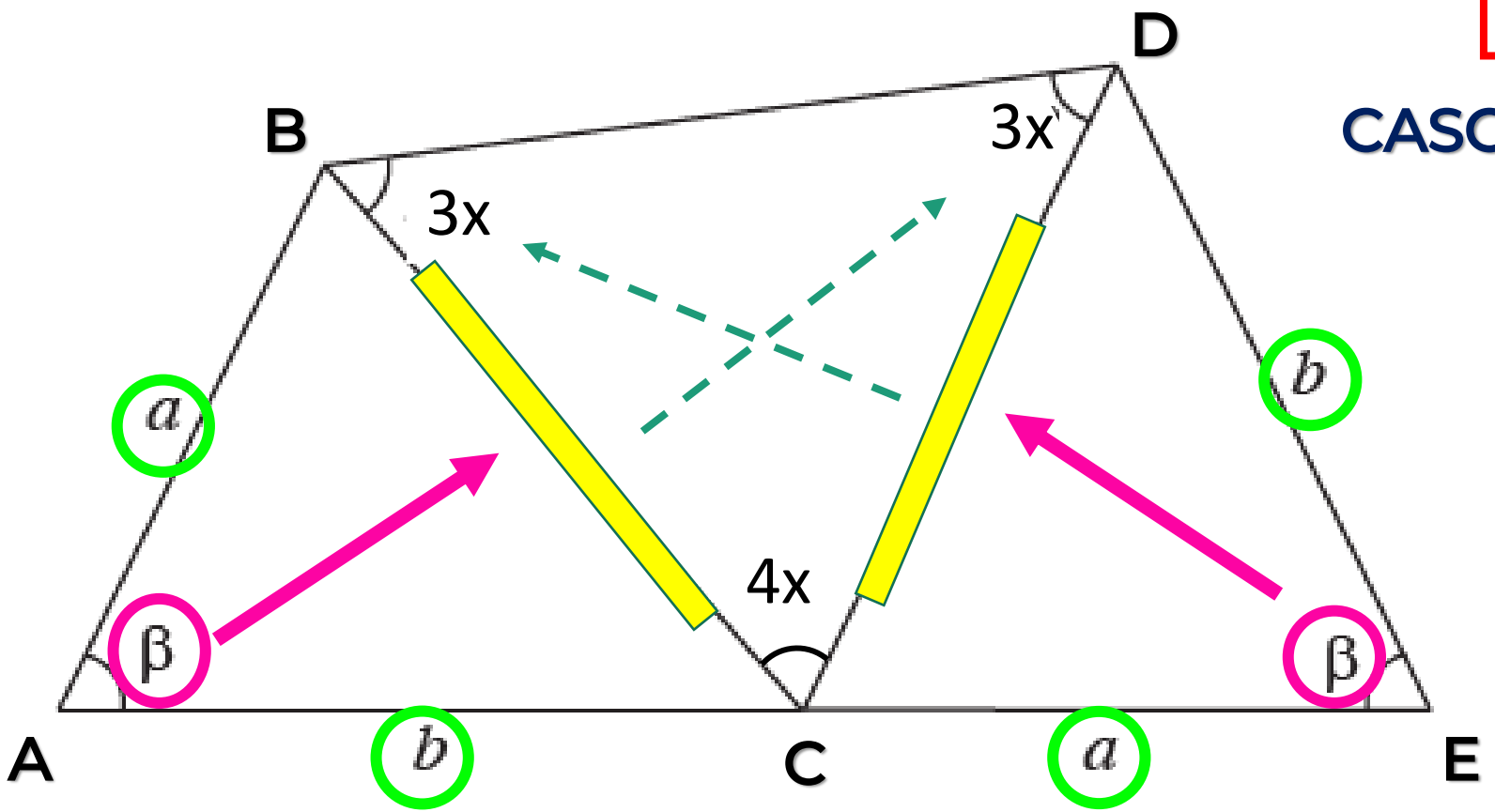


$x = 7$

$y = 6$

$x + y = 13$

5. Halle el valor de x



$\Delta\, BAC \cong \Delta\, CED$

CASO[Lado-Angulo-Lado]

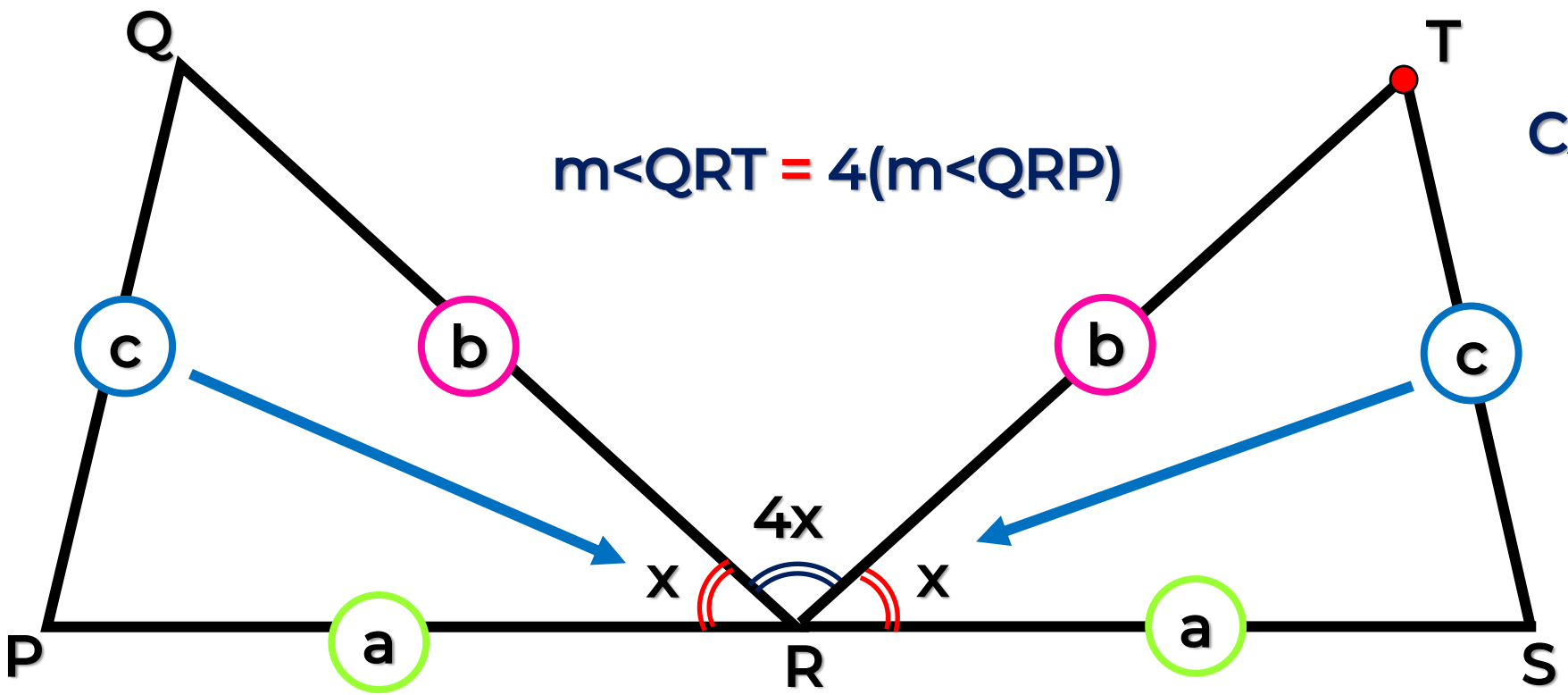
BC = CD

ΔBCD (isósceles)

3x + 4x + 3x = 180°

x = 18°

6. Se tiene un triángulo PQR y se prolonga PR hasta S tal que PR = RS, luego se ubica un punto exterior T, relativo a QR, TR = QR y TS = PQ y m<QRT = 4m<QRP . Halle m<QRP.



$\Delta PQR \cong \Delta STR$

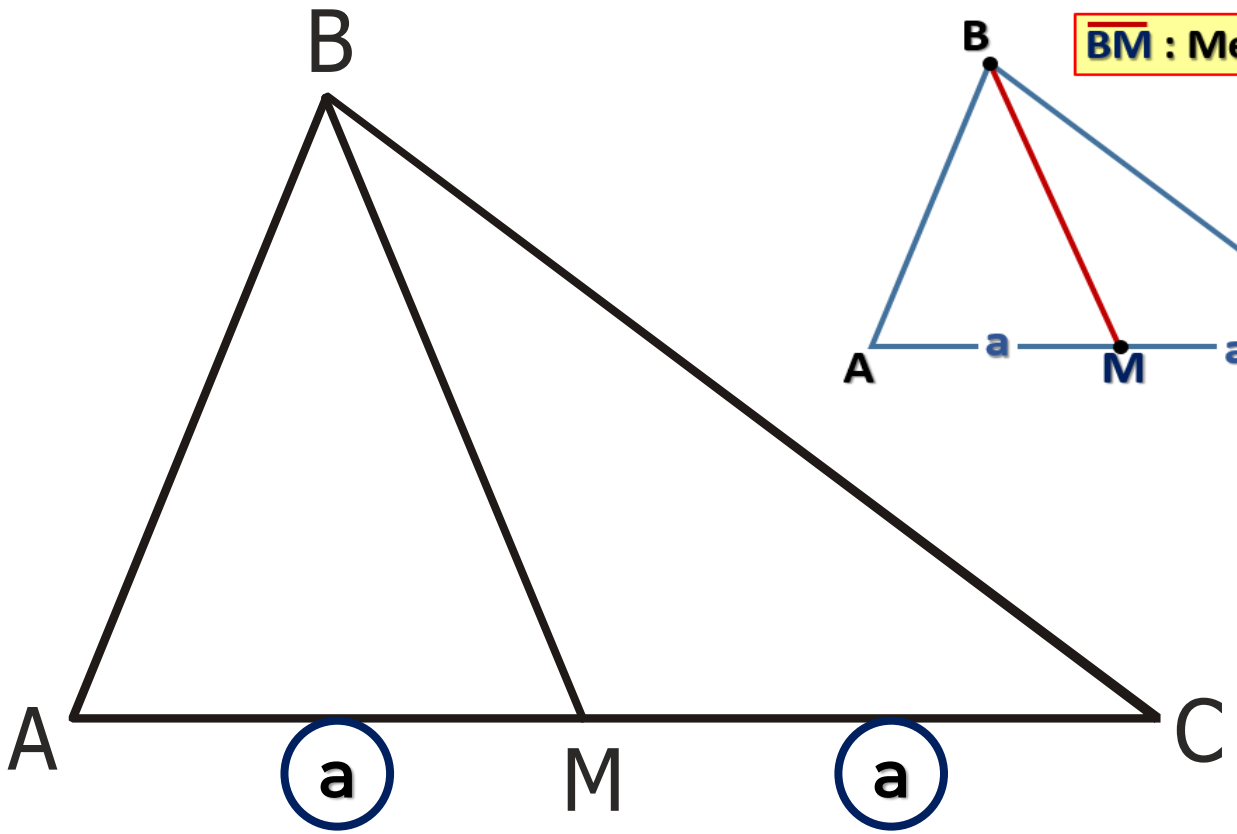
CASO[LADO-LADO-LADO

En el vértice R

$x + 4x + x = 180°$

$x = 30°$

7. Si $\overline{BM}$ es mediana y AM + AC = 42 cm , hallar MC.



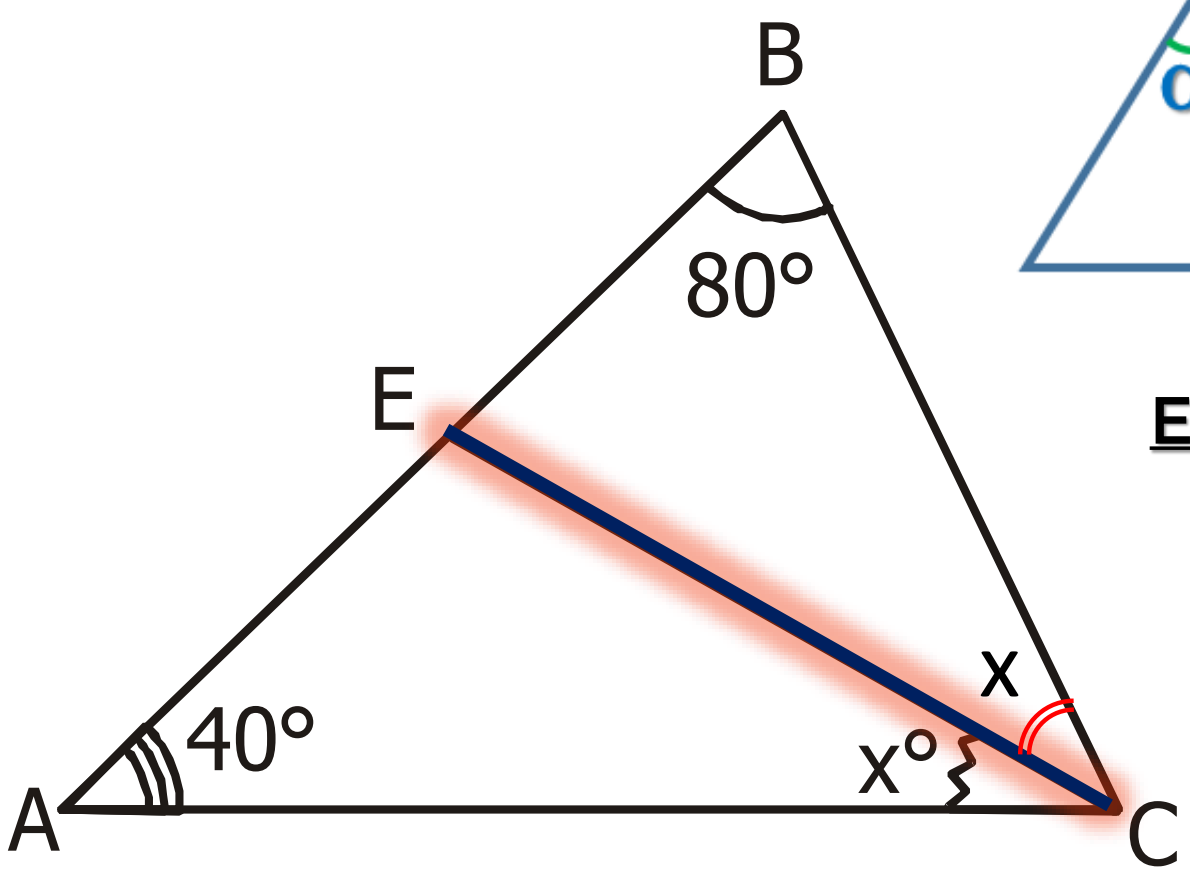
$$\underbrace{AM} + \underbrace{AC} = 42$$

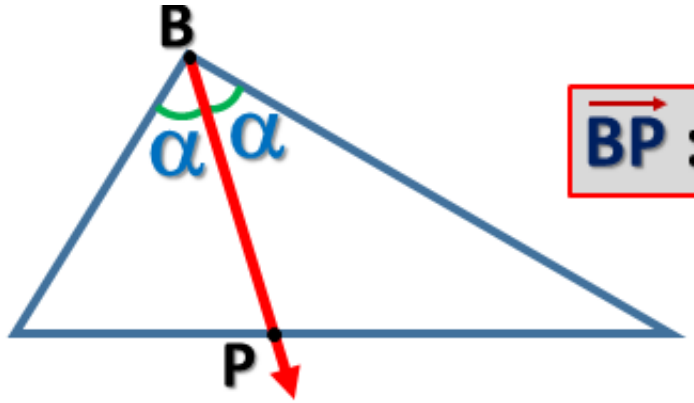
$$a + 2a = 42$$

$$3a = 42$$

$$a = 14$$

8. Si $\overline{CE}$ es bisectriz del ángulo C, halle el valor de x





$\overrightarrow{BP}$: Bisectriz Interior

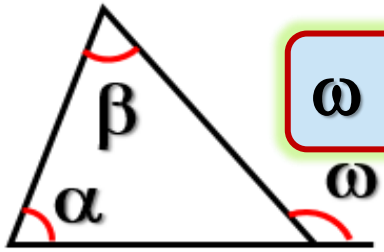
En el ΔABC

$$40° + x + x + 80° = 180°$$

$$2x = 60°$$

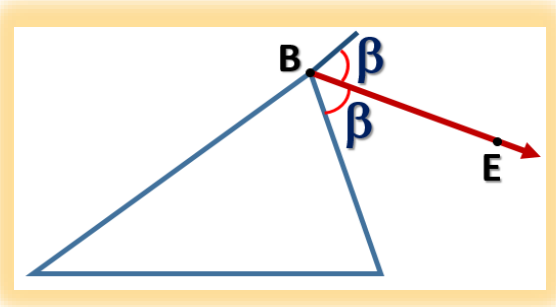
$$x = 30°$$

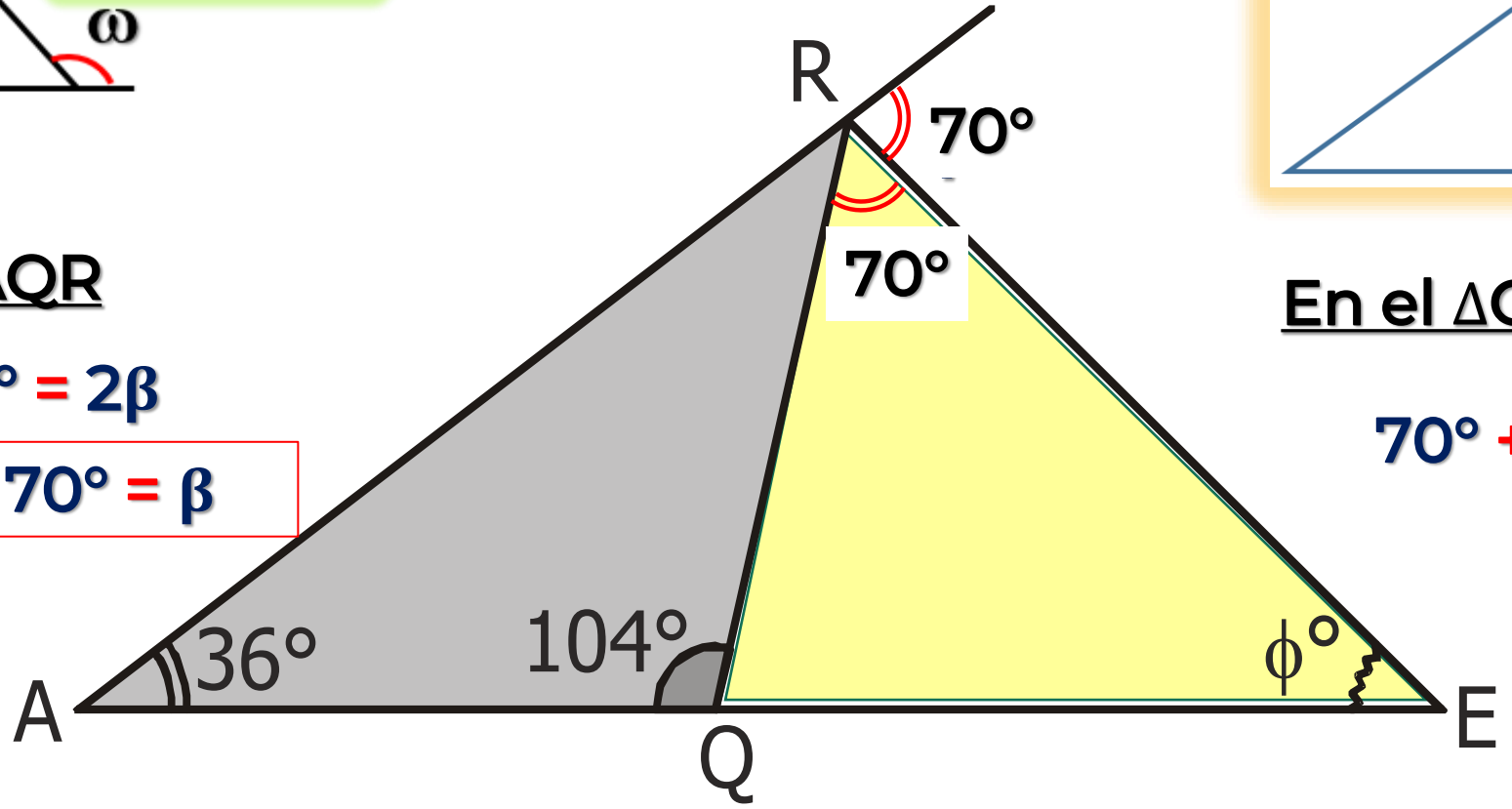
9. En el gráfico $\overline{RE}$ es bisectriz exterior del triángulo ARQ. Hallar ϕ



$\omega = \alpha + \beta$

$\overrightarrow{BE}$: Bisectriz Exterior





En el Δ AQR

$36° + 104° = 2\beta$

$70° = \beta$

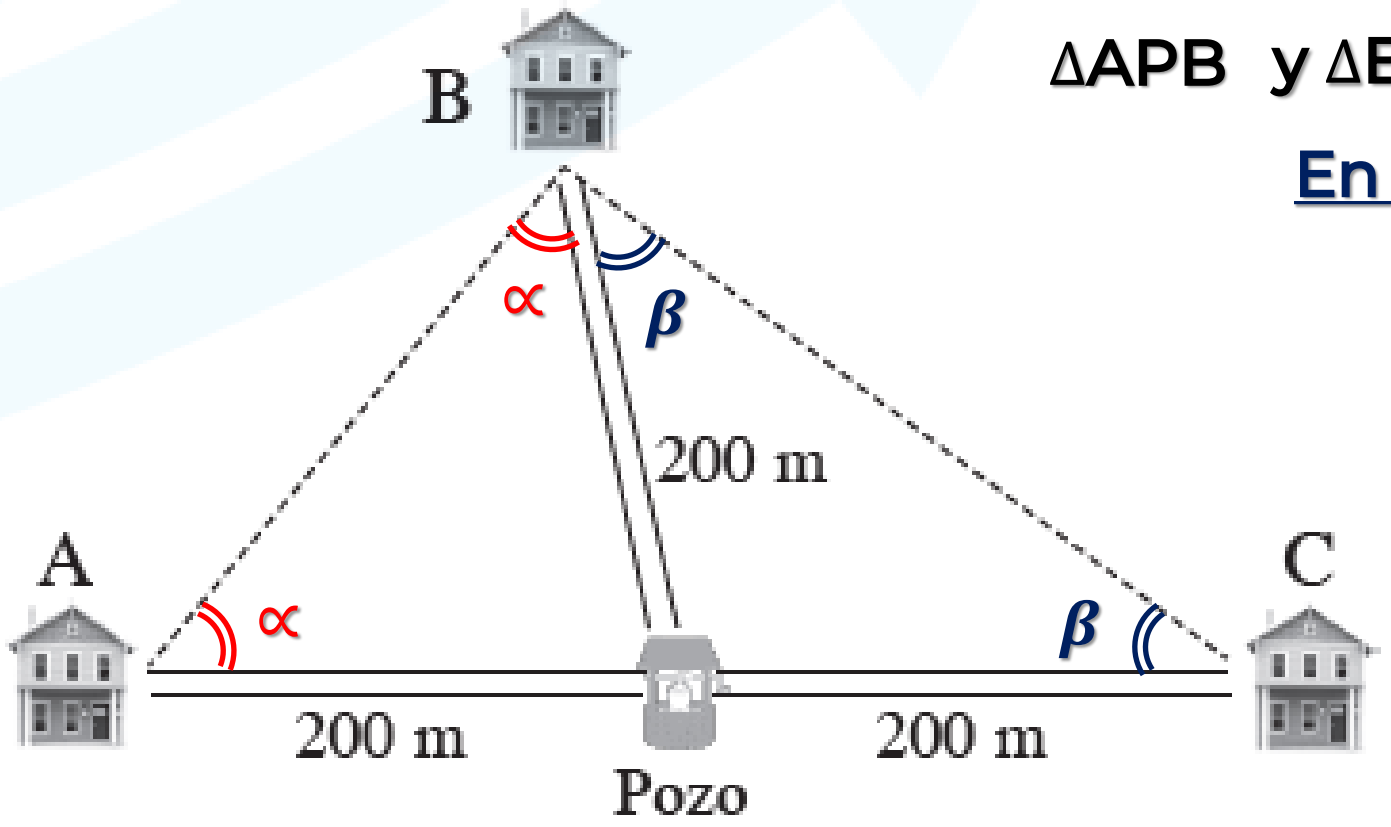
En el ΔQRE

$70° + \phi = 104°$

$\phi = 34°$

10. Se construye un pozo de agua para abastecer tres viviendas en una población rural, tal como se muestra en el gráfico. Halle m<ABC.

Halle m<ABC. $= \propto + \beta$



ΔAPB y ΔBPC Isósceles

En el Δ ABC

$$\propto + \beta + \propto + \beta = 180°$$

$$2 \propto + 2\beta = 180°$$

$$\propto + \beta = 90°$$

m<ABC = 90°