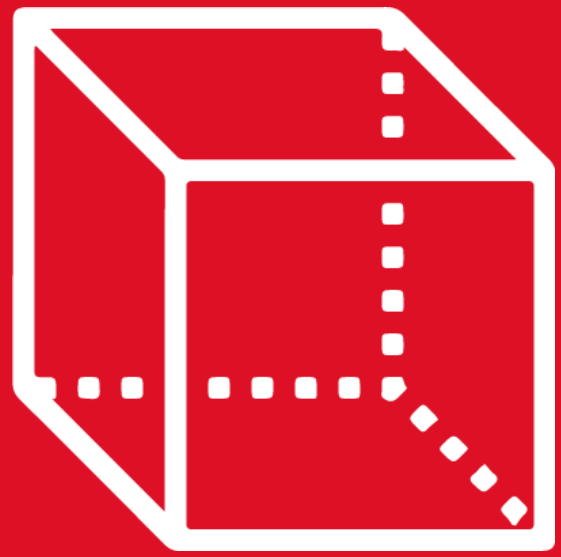
# GEOMETRÍA

## Capítulo 1

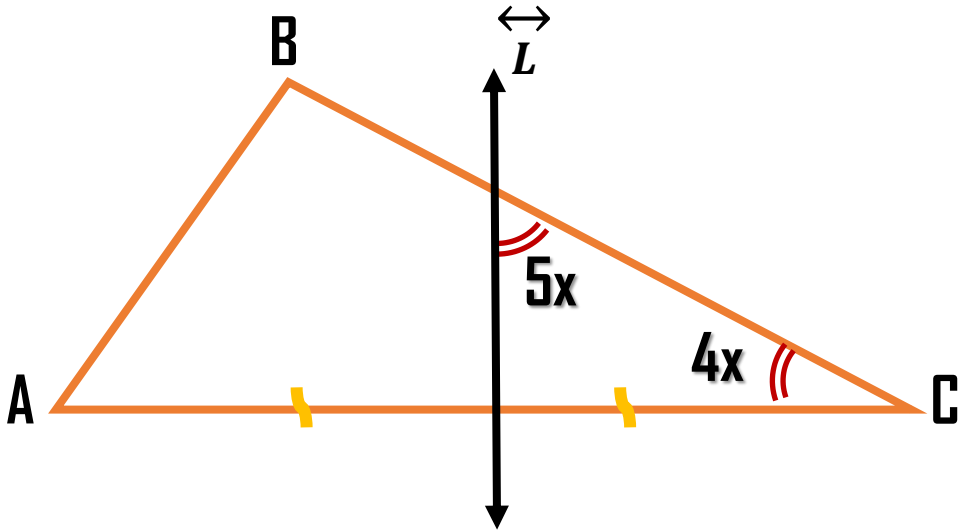


**1st**
**SECONDARY**

## Repaso

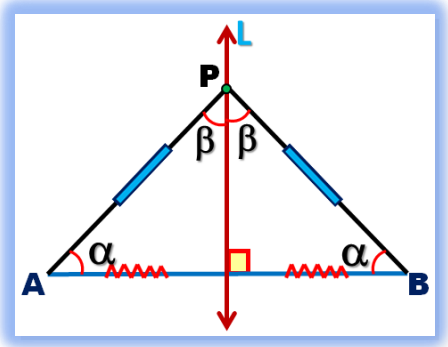
SACO OLIVEROS

1. Si es L mediatriz de $\overline{AC}$, halle el valor de x.

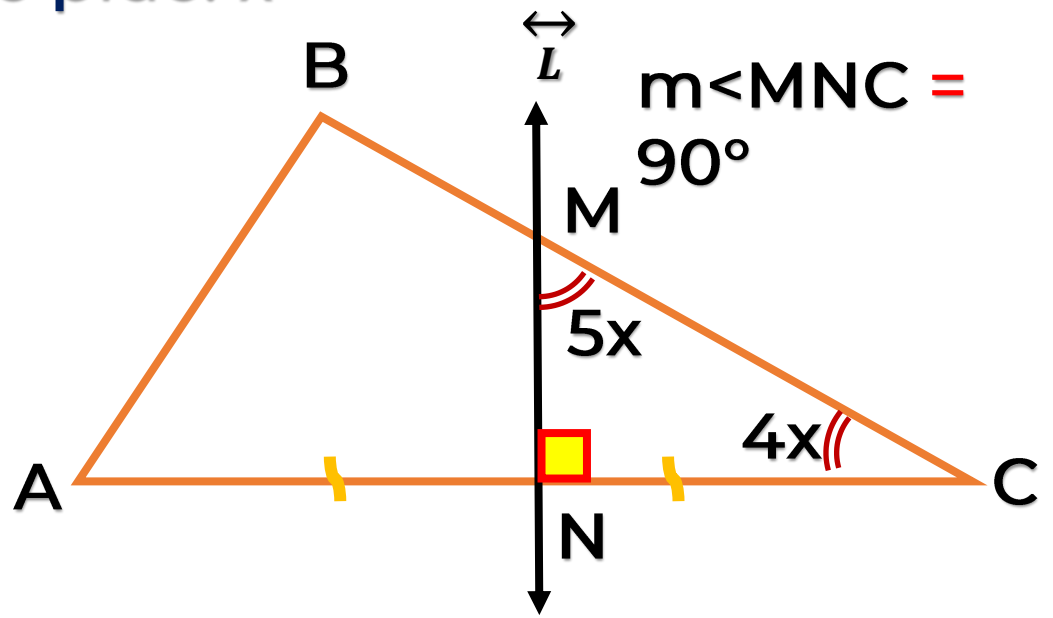



**Resolución** $\overleftrightarrow{L}$ Es mediatriz de $\overline{AC}$

Teorema de la mediatriz.




Se pide: x



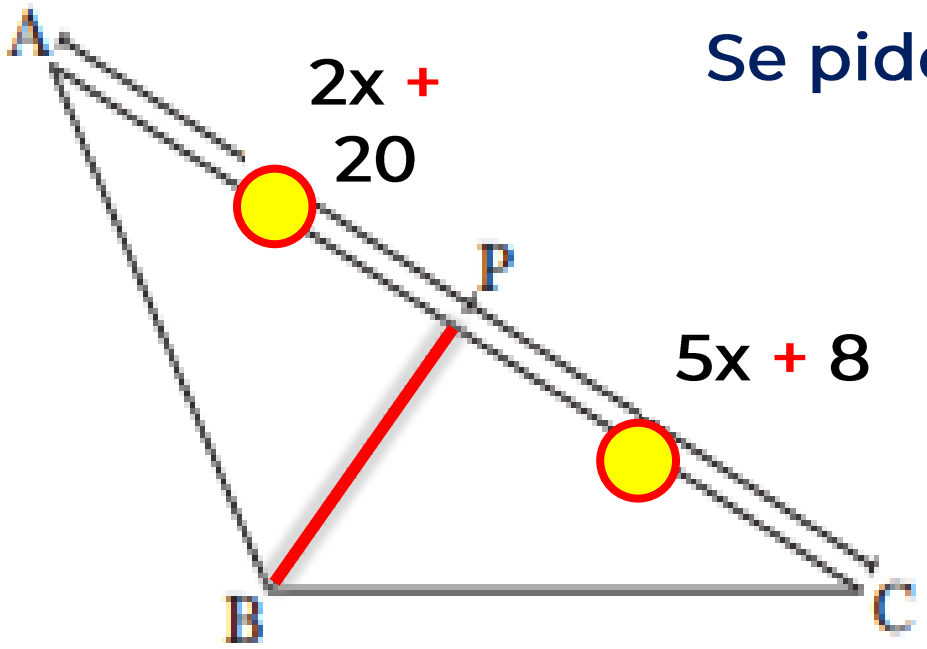

En el △ MNC

5x + 4x = 90°

9x = 90°

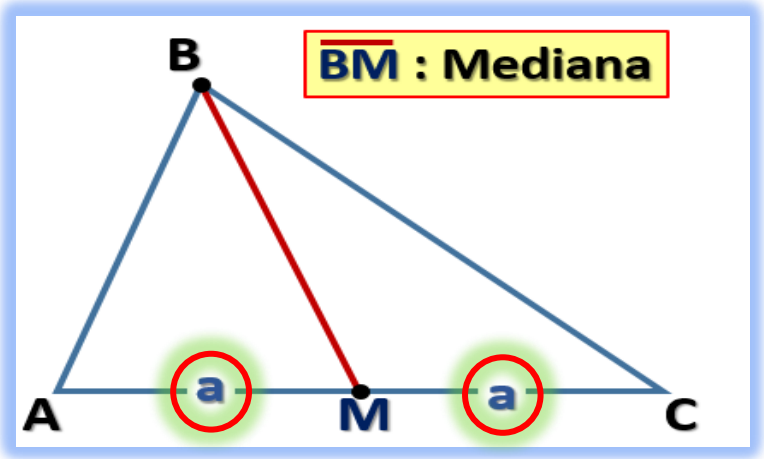
x = 10°

## 2. Halle el valor de x, sabiendo que $\overline{BP}$ es mediana.




Se pide: x

Si $\overline{BP}$ es mediana



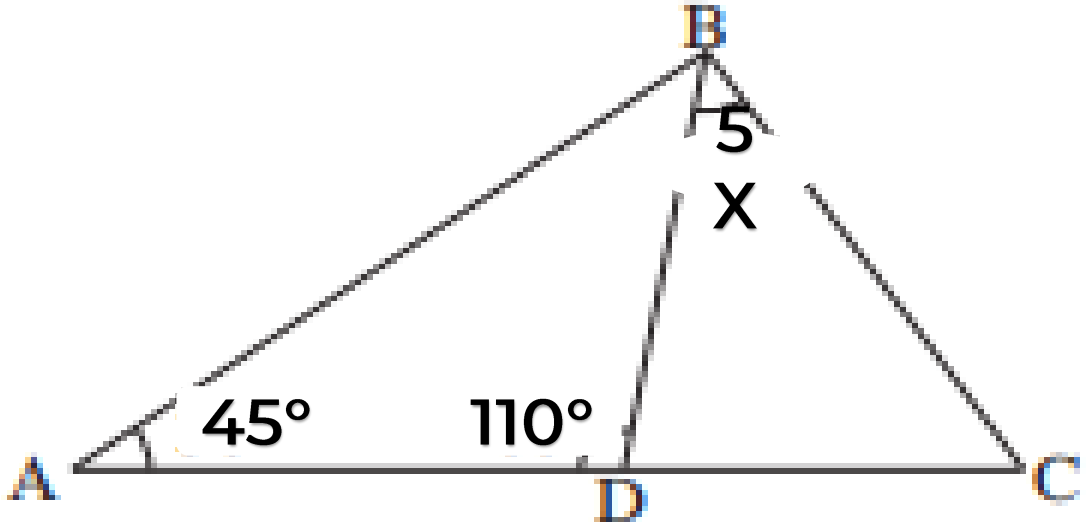

$$AP = PC$$

$$2X + 20 = 5X + 8$$

$$12 = 3X$$

$$4 = X$$

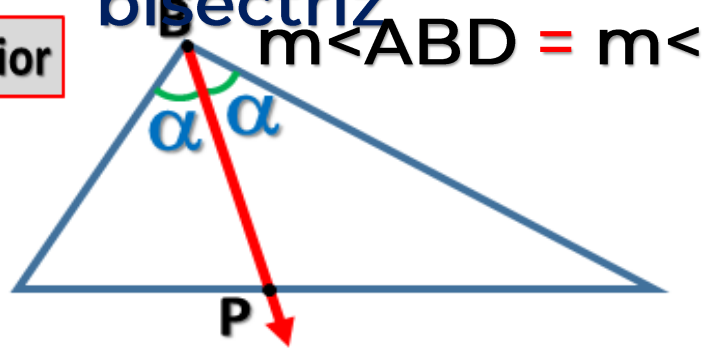
3. Si $\overline{BD}$ es bisectriz, halle el valor de x.




## Resolución

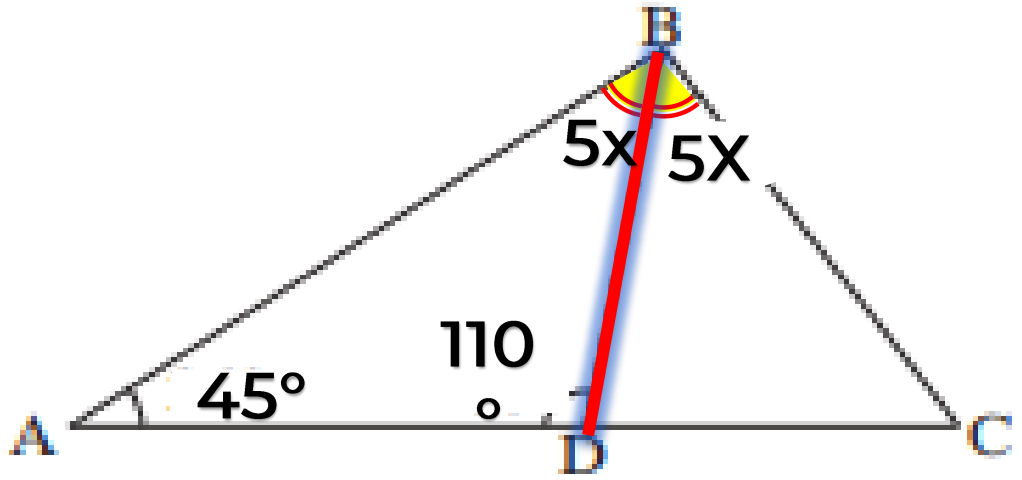
$\overline{BD}$ es bisectriz

$\overrightarrow{BP}$ : Bisectriz Interior




m<ABD = m<DBC

Se pide: x




En el ⊿ ABD

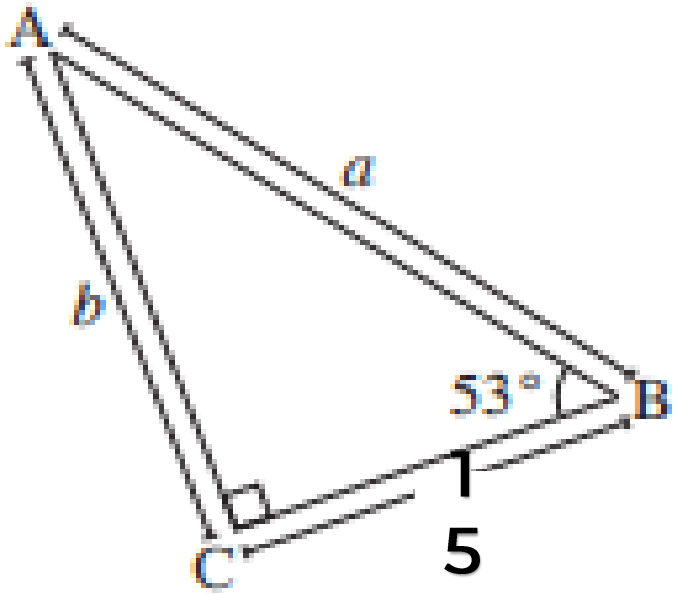
$45° + 110° + 5X = 180°$

$155° + 5X = 180°$

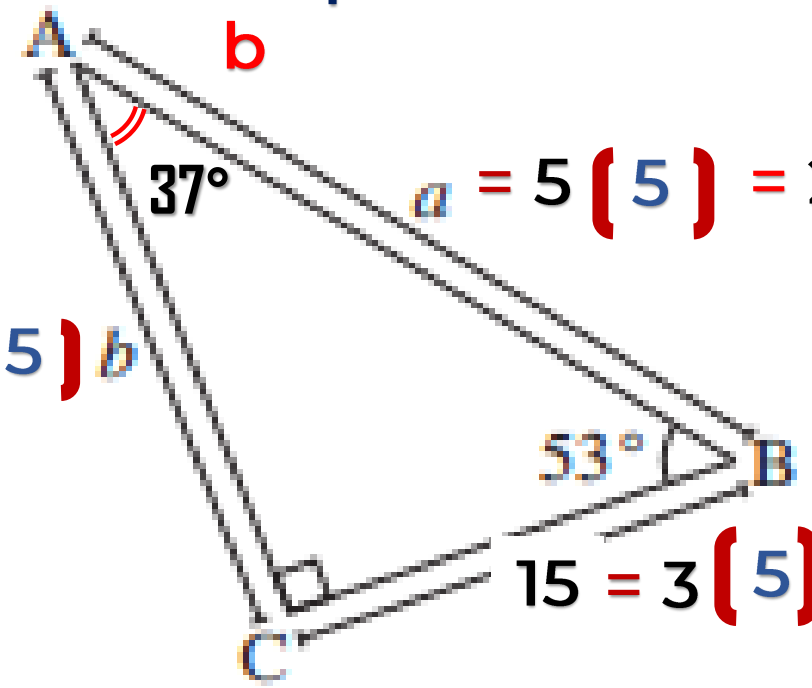
$5X = 25°$

$X = 5°$

# 4. Calcule la diferencia de a y b

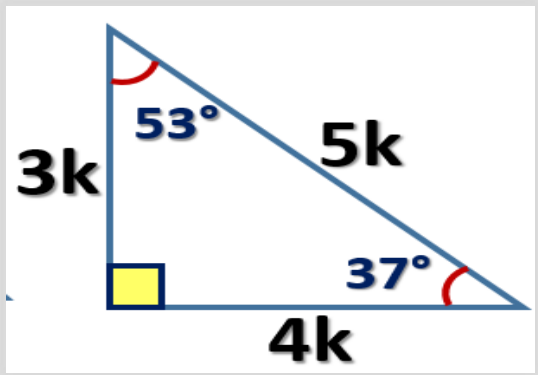



Se pide: a - b




## Resolución

⊿ ACB (53° y 37°)

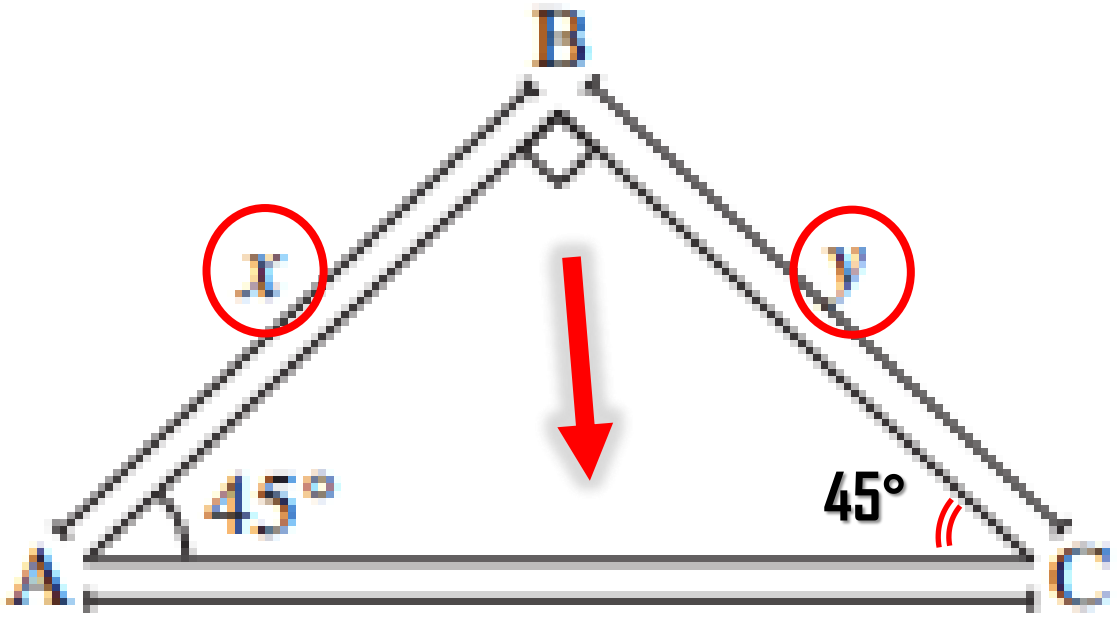



a - b

25 - 20

**a - b = 5**

## 5. En el gráfico, halle el valor de (x + y).



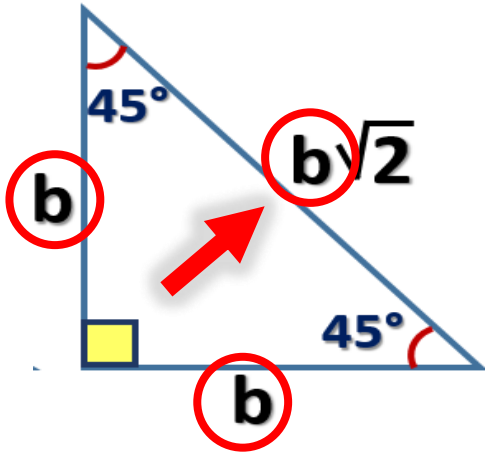

$25\sqrt{2}$

Resolución

Se pide: x + y

En el ⊿ ACB (45° y 45°)

x = y




AC = $25\sqrt{2}$ = $x\sqrt{2}$

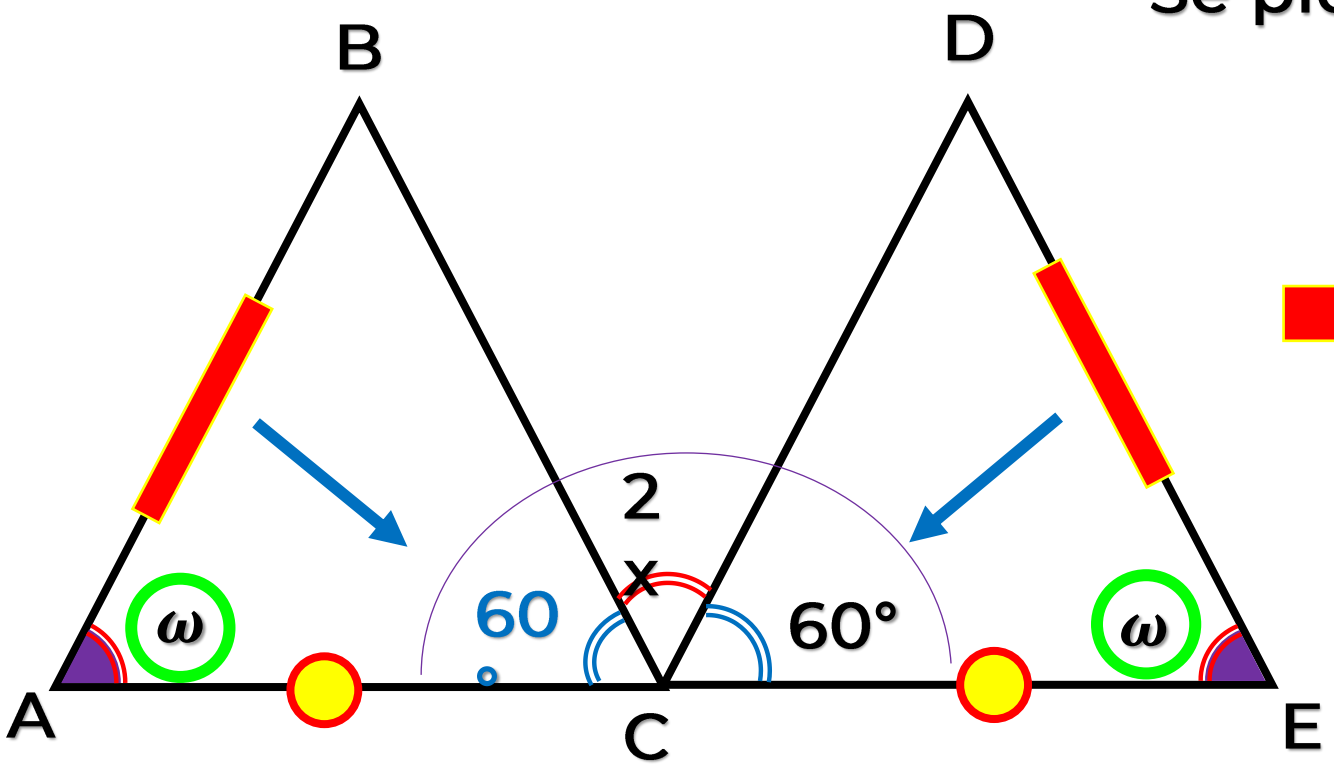
x = 25

y = 25

x + y = 50

# 6. Del gráfico, halle el valor de x. Si AB = DE y AC = CE.

Se pide: x




▲ABC ≅ ▲EDC

(L-A-L)

En el vértice C

$60° + 60° + 2x = 180°$

$120° + 2x = 180°$

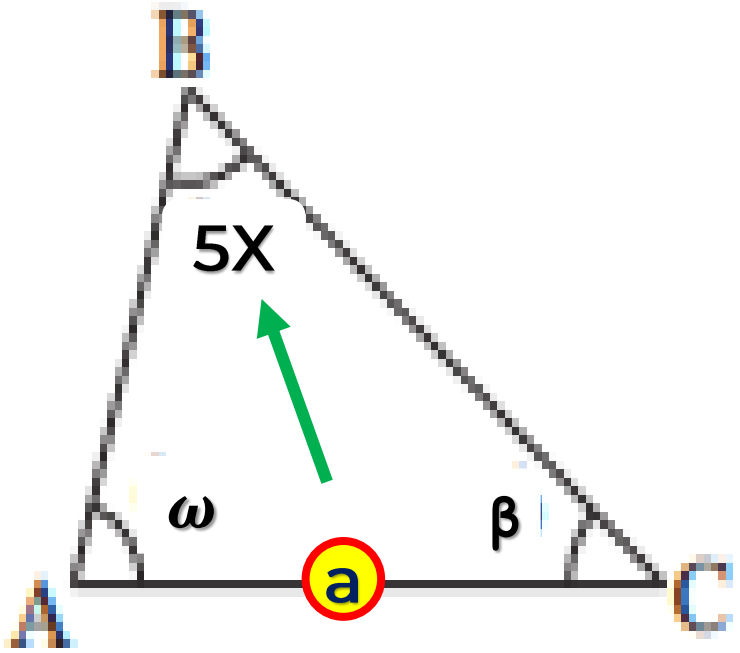
$2x = 60°$

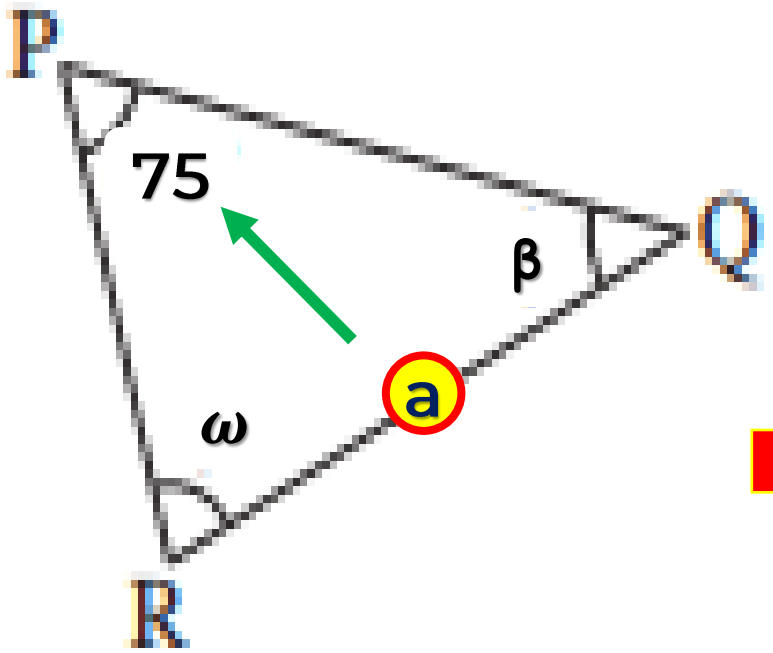
$X = 30°$

$m < DCE = m < BCA = 60°$

## 7. Del gráfico, si AC ≅ RQ, halle el valor de x.

Se pide: x




▲ACB ≅ ▲RQP

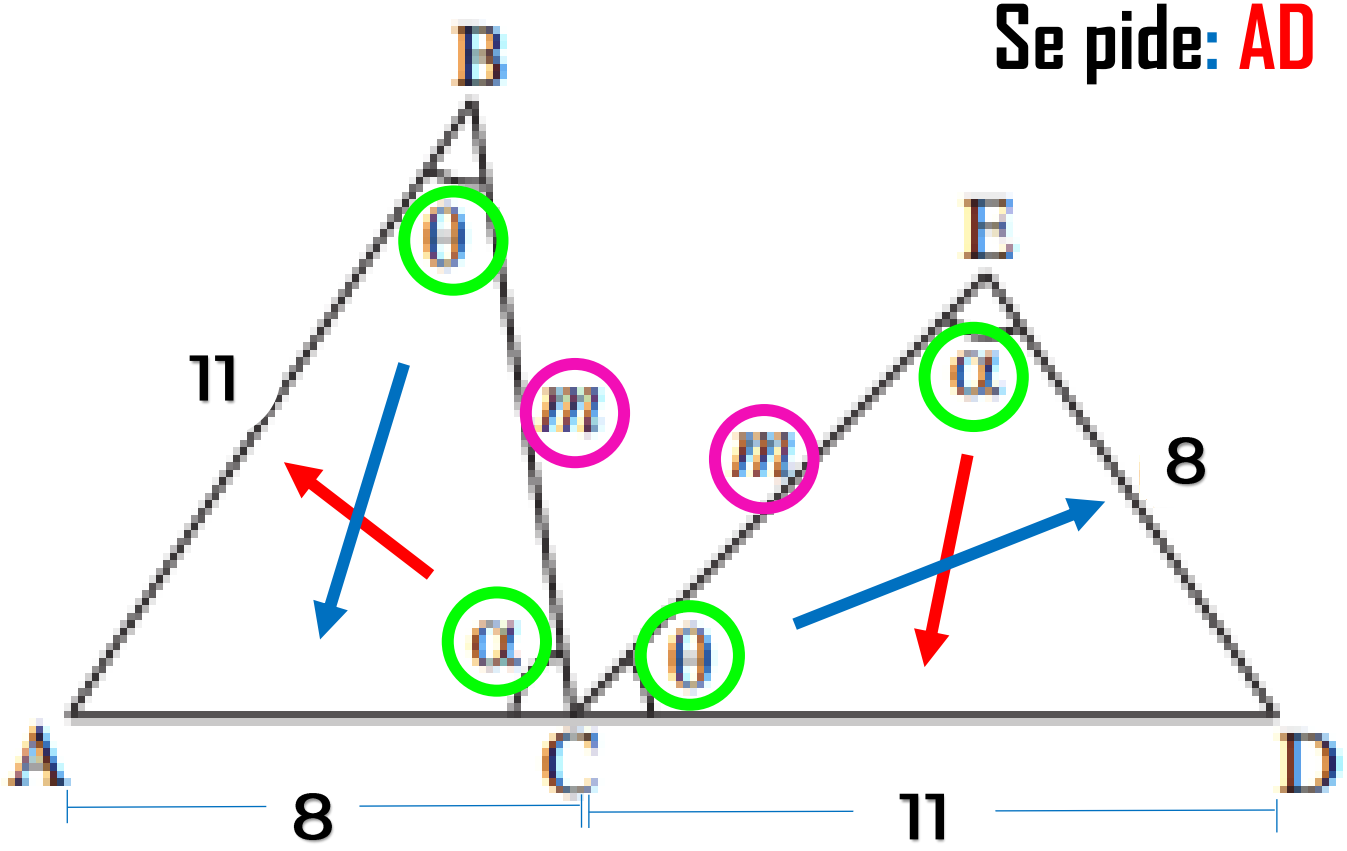
(L-A-L)

m < ABC = m < RPQ

5 x = 75°

x = 15°

## 8. En el gráfico, halle AD.




Se pide: AD

▲BCA ≅ ▲CED

(A-L-A)

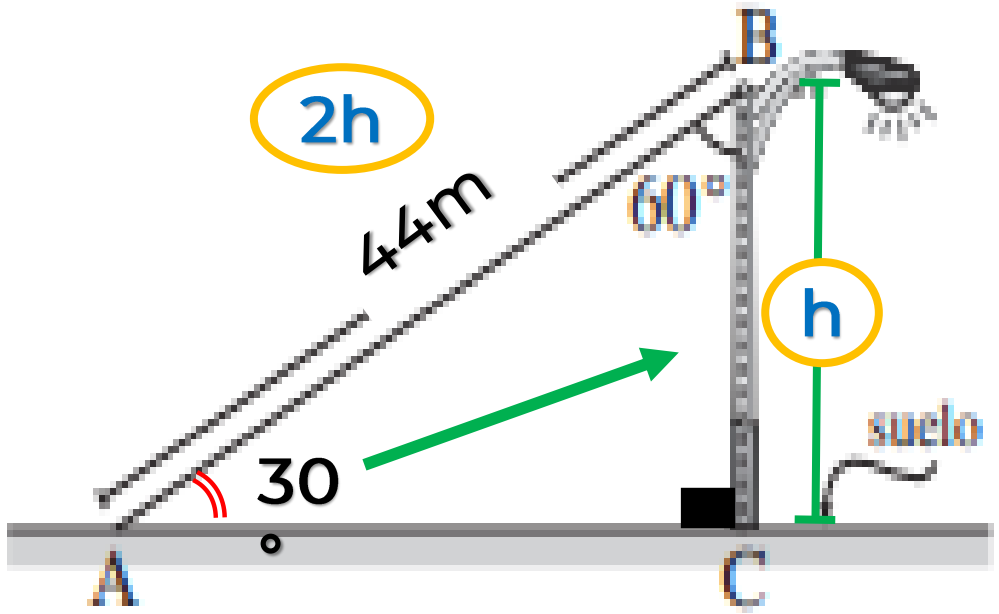
$$\begin{cases} AC = ED = 8 \\ CD = AB = 11 \end{cases}$$

AD = AC + CD

8 + 11

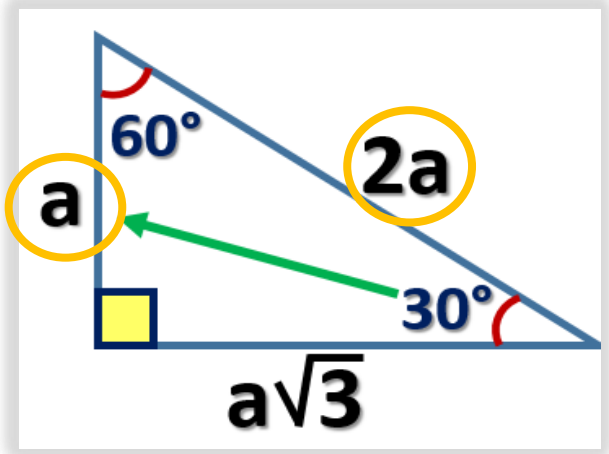
AD = 19

## 9. En la figura En la figura, se muestra un poste de alumbrado público, calcule la altura de dicho poste.




Se pide: h

En el ⊿ ACB (30° y 60°)



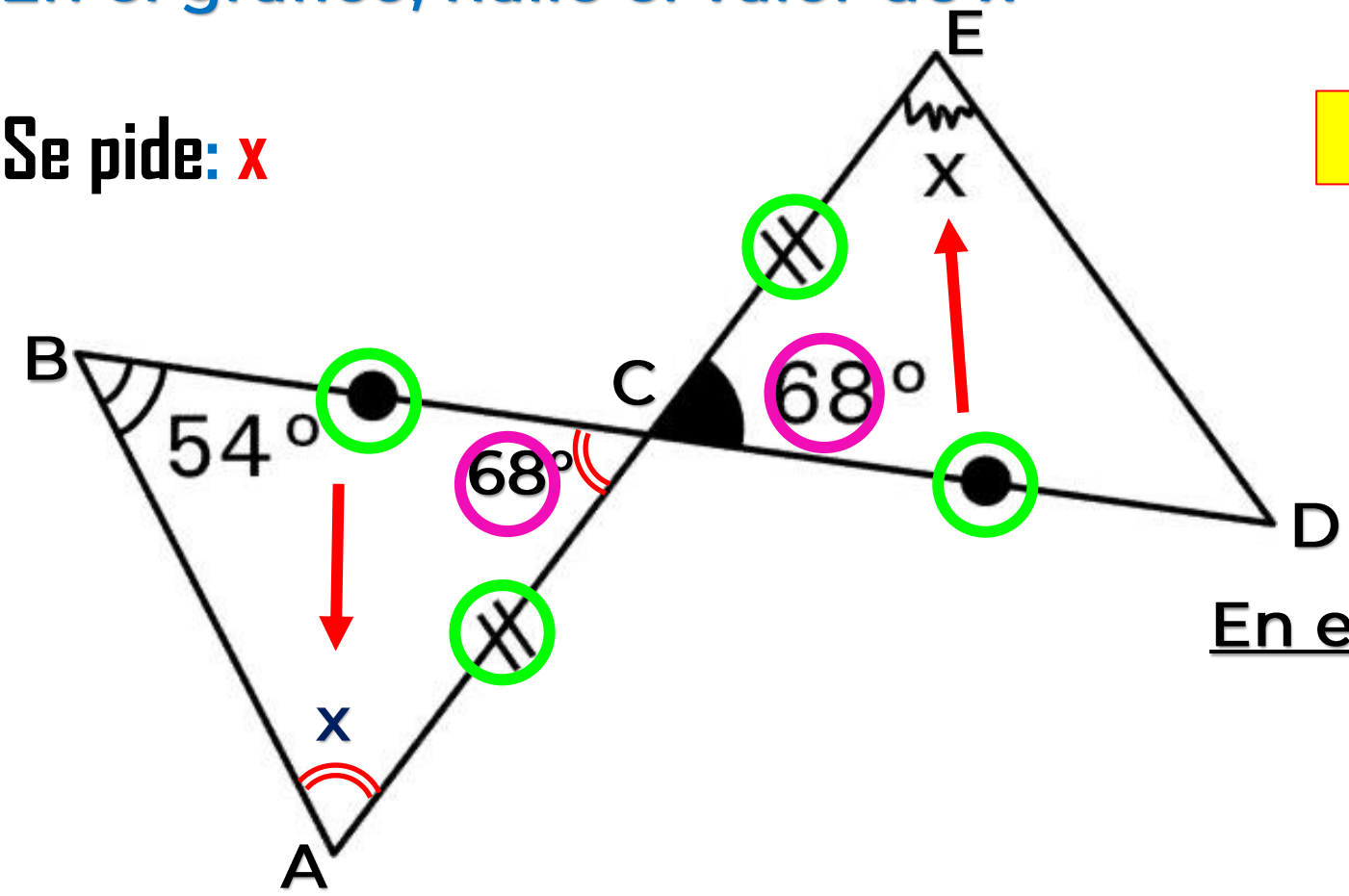

AB = 2h

44 = 2h

h = 22 m

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

**Se pide: x**




▲ABC ≅ ▲ECD

(L-A-L)

m < CED = m < BAC = x

En el ▲ABC

$54° + 68° + x = 180°$

$122° + x = 180°$

$x = 58°$