



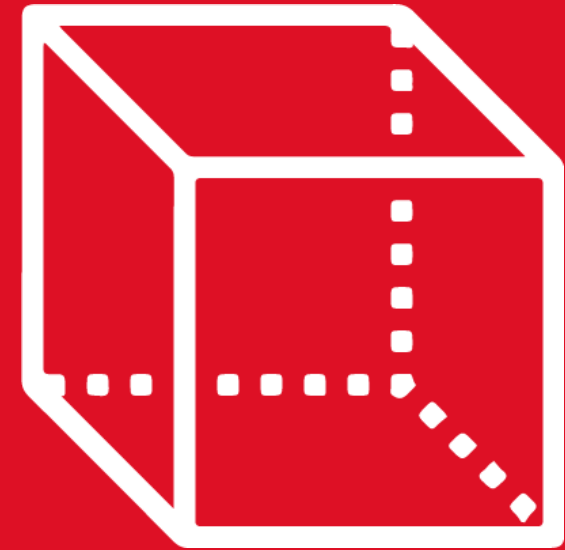
GEOMETRÍA

Capítulo 7

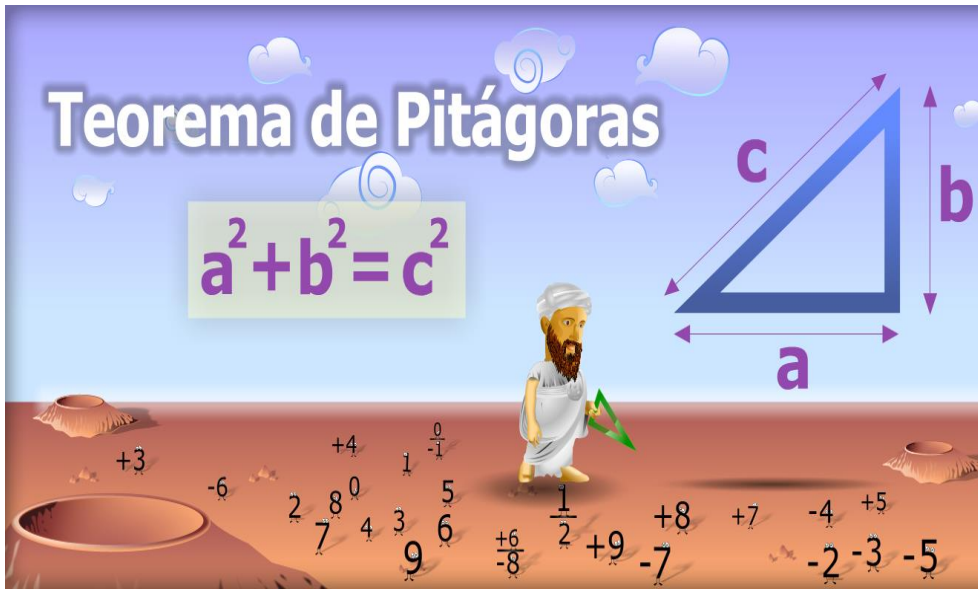
Sesión 1

2th
SECONDARY

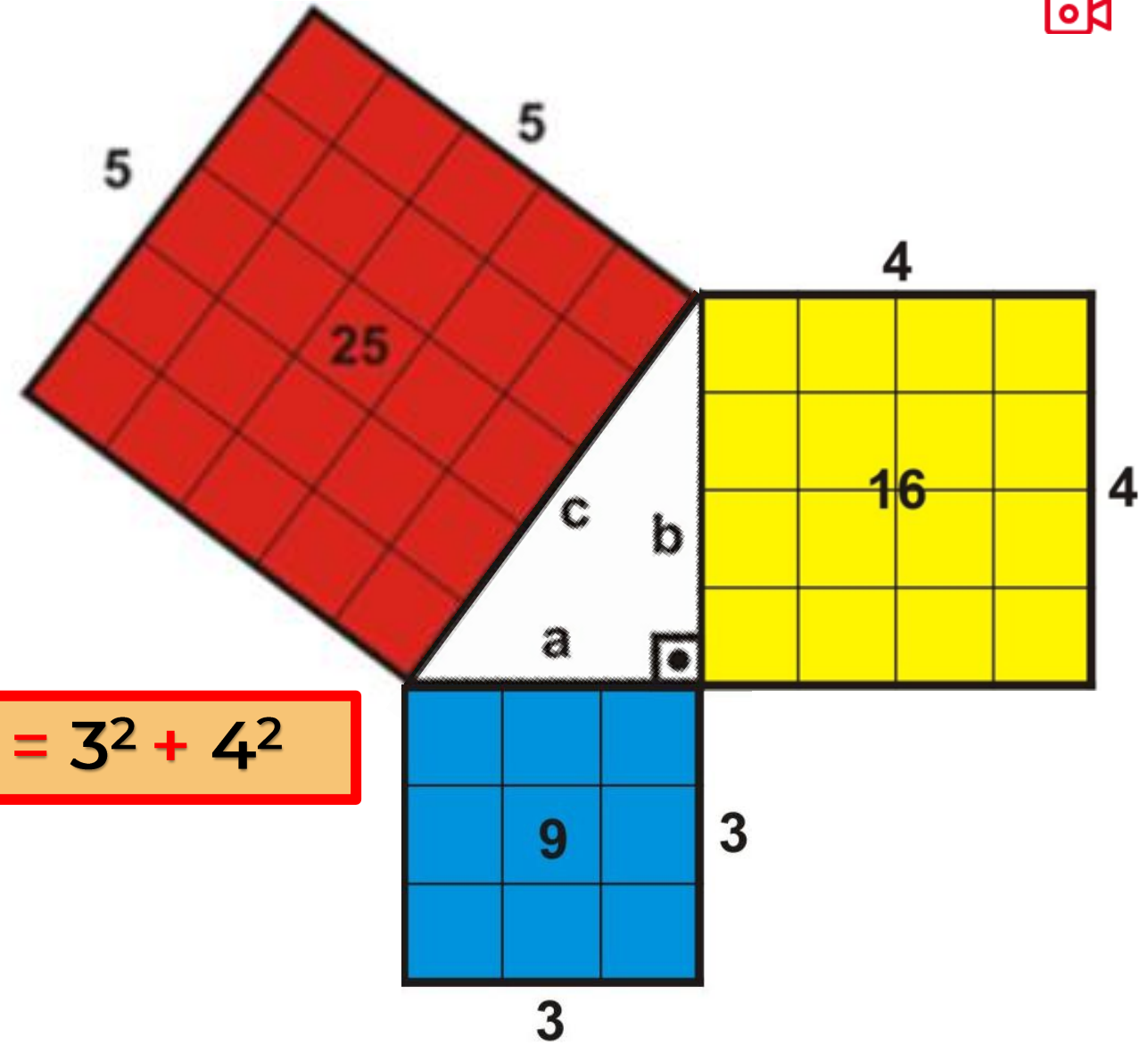
**TRIÁNGULOS RECTÁNGULOS
NOTABLES**



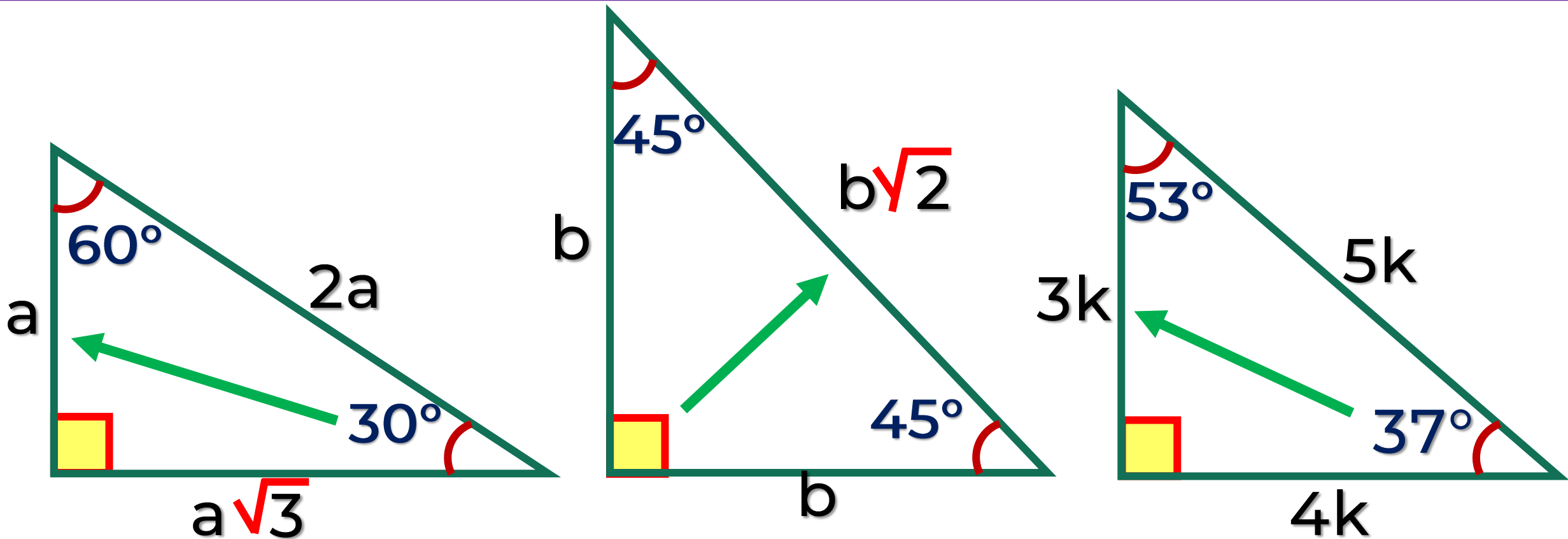
 **SACO OLIVEROS**



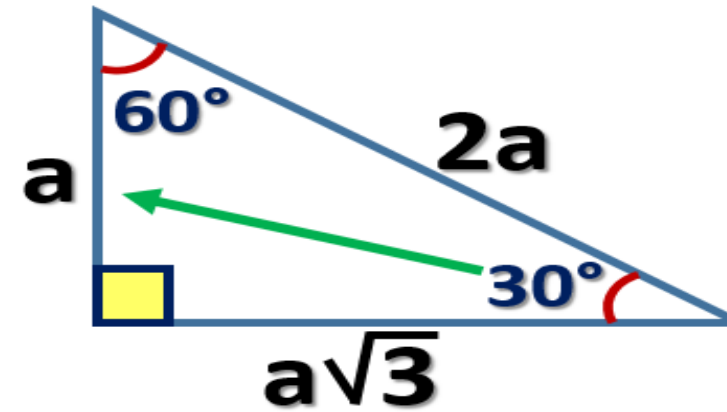
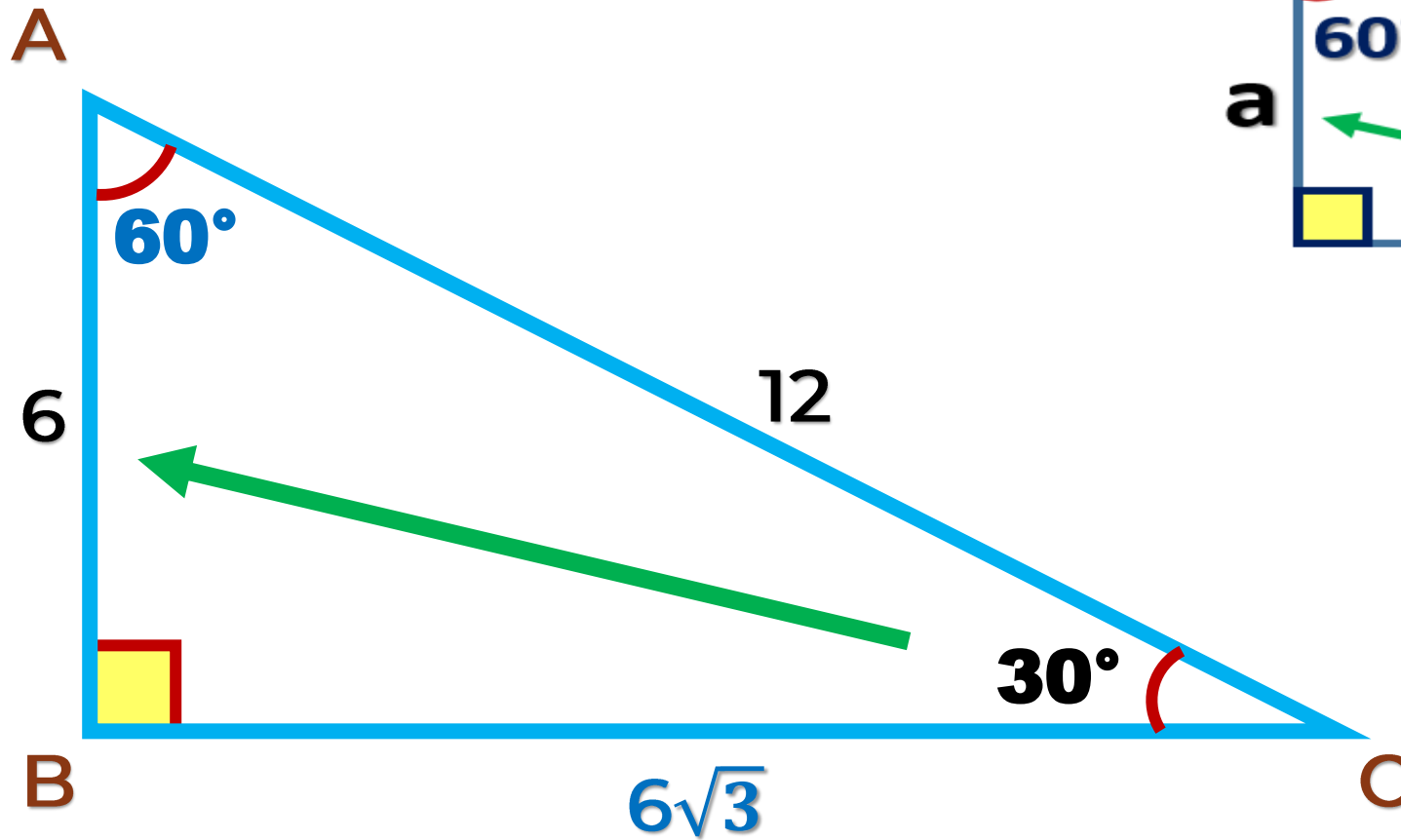
$$5^2 = 3^2 + 4^2$$



TRIÁNGULOS RECTÁNGULOS NOTABLES



1. Se tiene un triángulo ABC, recto en B, $BC = 6\sqrt{3}$ m y $m\angle BAC = 60^\circ$, halle AC.

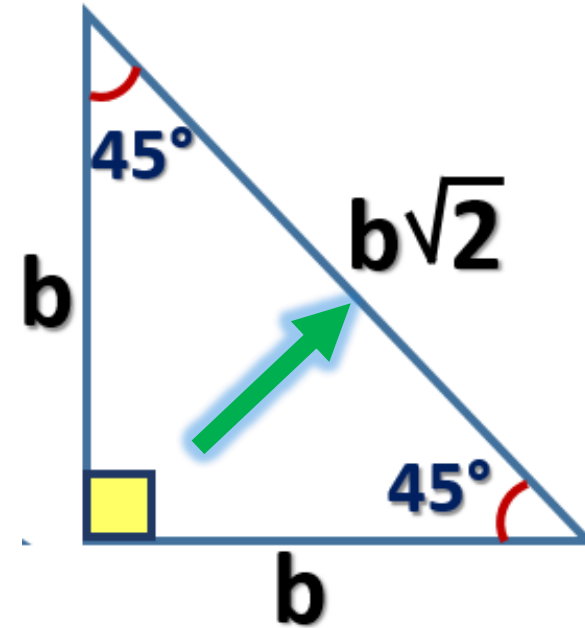
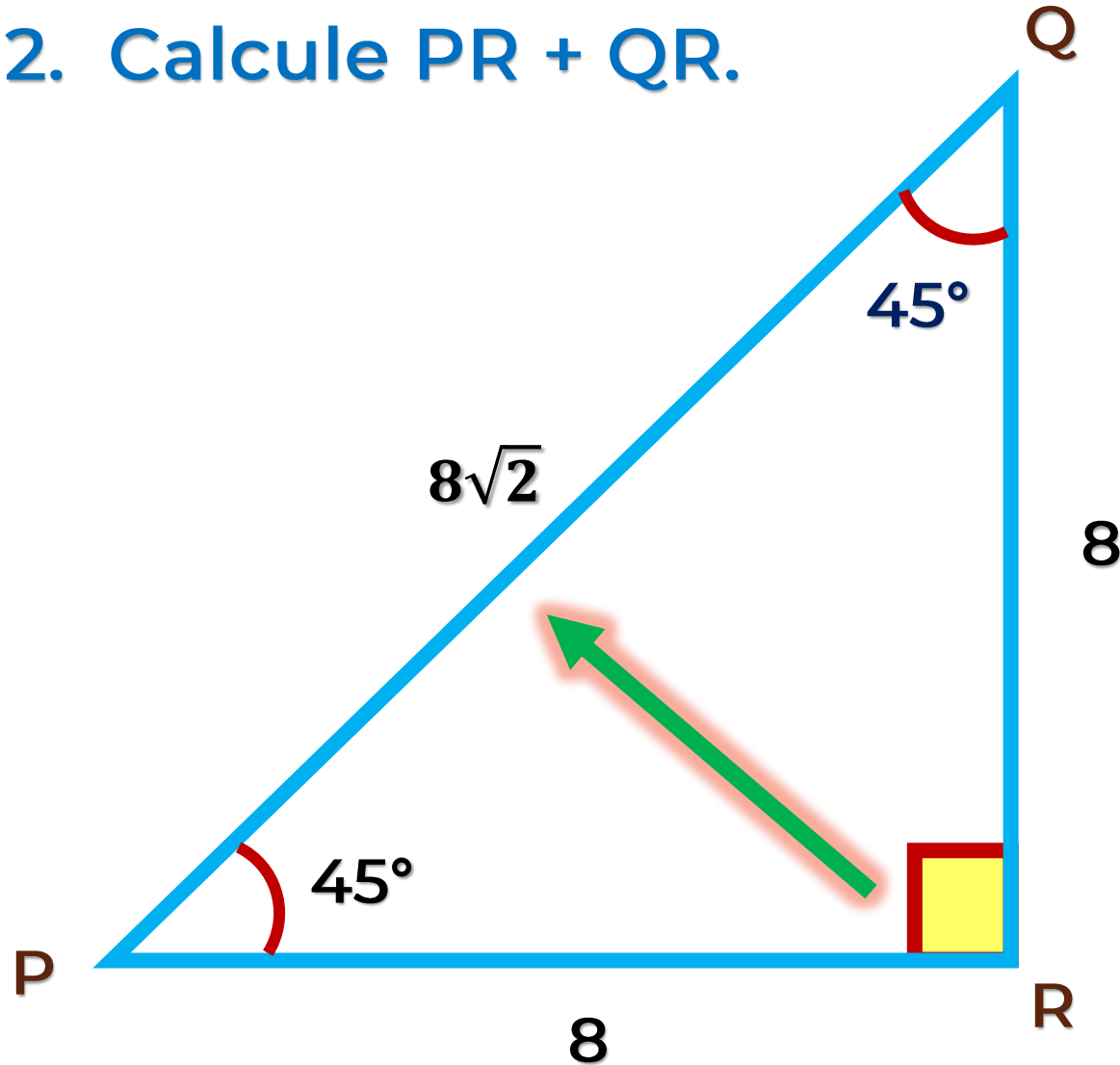


➔ $AC = 2 [6]$

$AC = 12$



2. Calcule $PR + QR$.



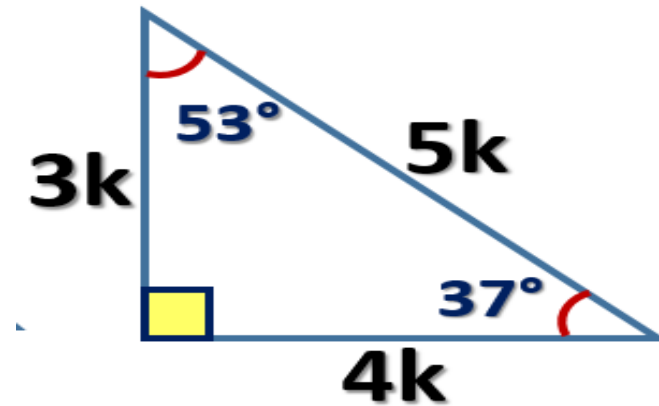
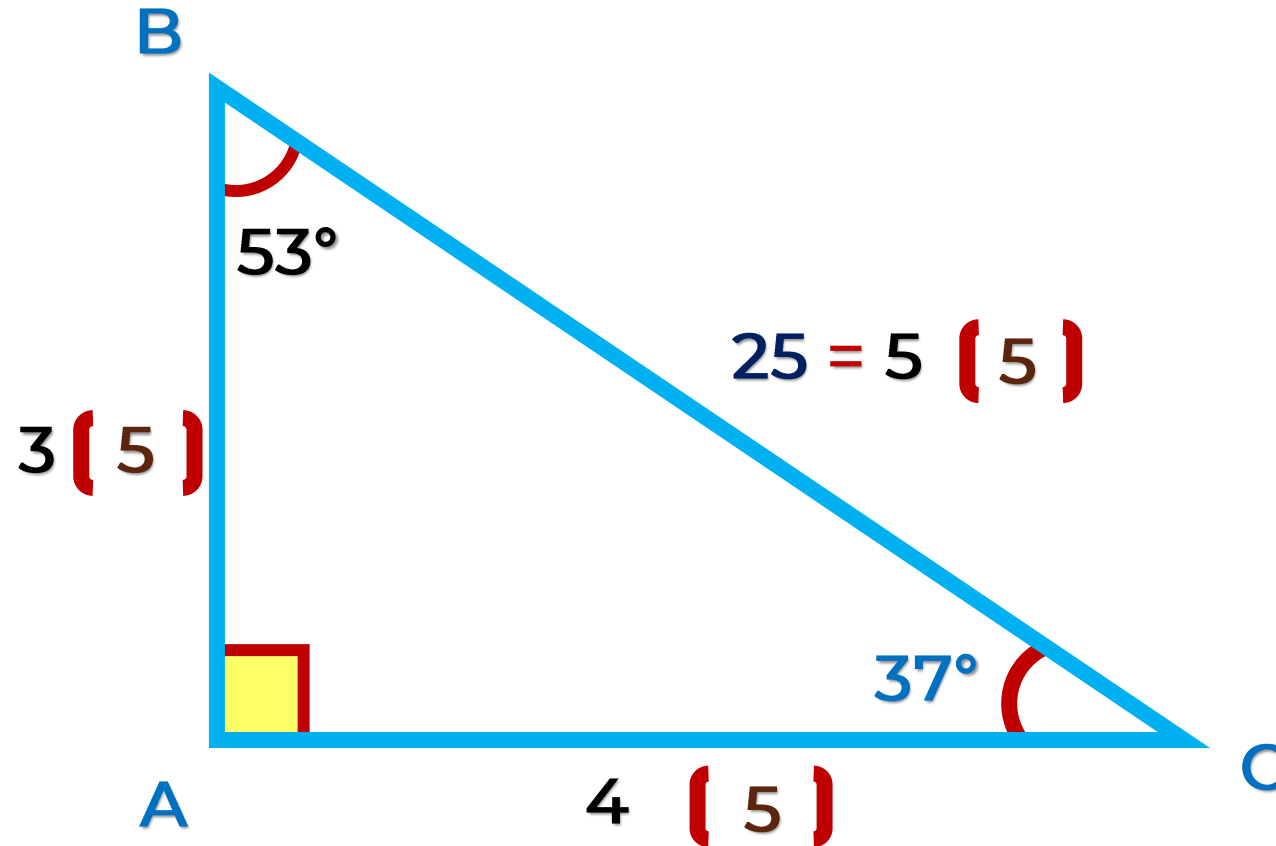
Nos piden

➡ $PR + QR = 8 + 8$

$PR + QR = 16$



3. La hipotenusa de un triángulo rectángulo mide 25 y un ángulo agudo mide 37° . Halle la longitud del mayor cateto.

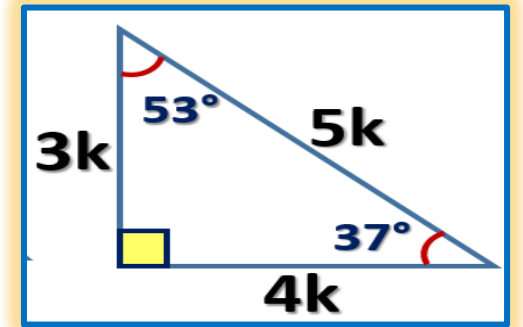
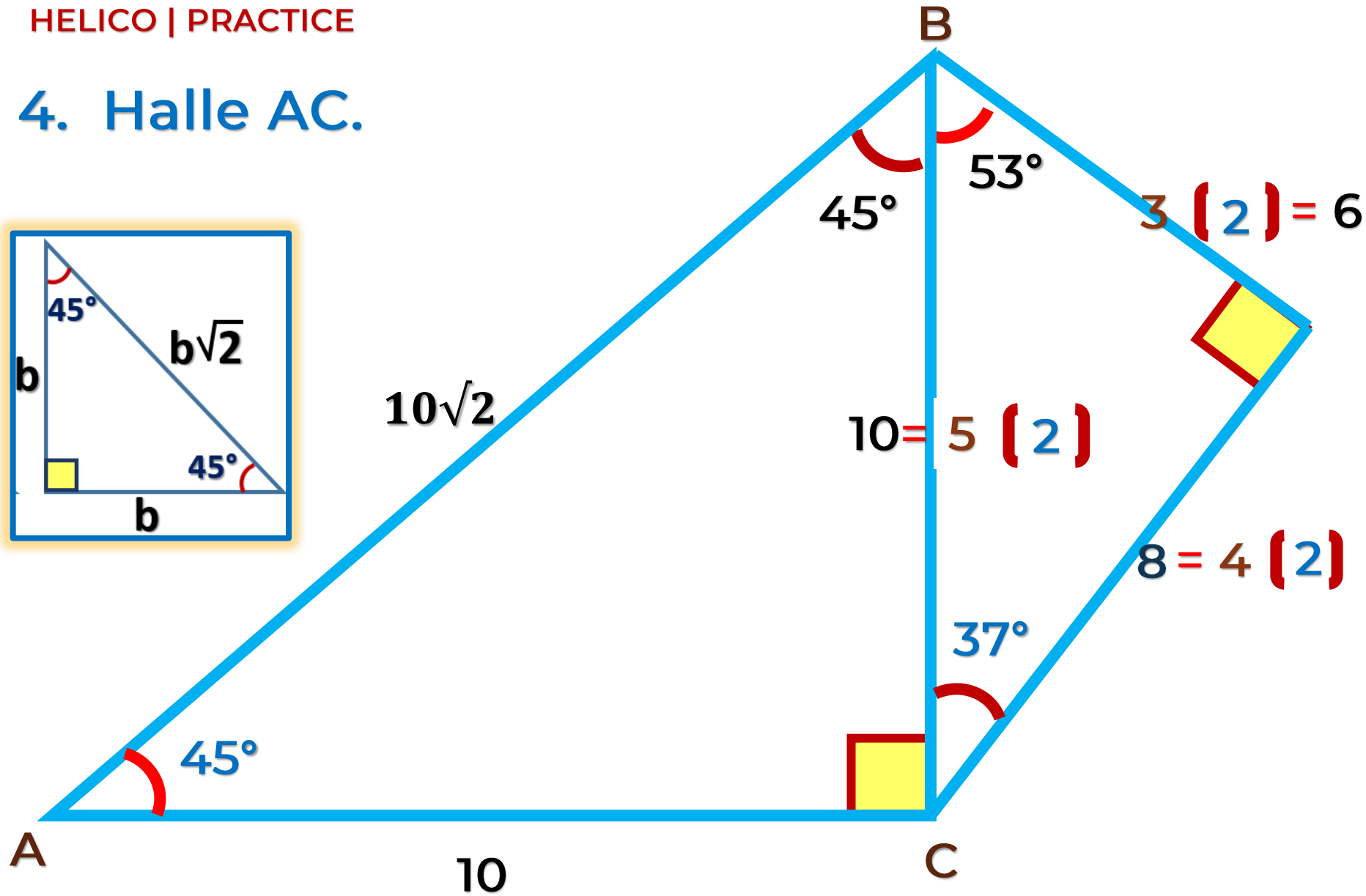
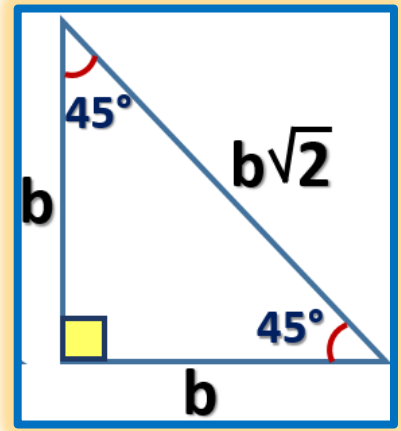


➔ $AC = 4 (5)$

$AC = 20$



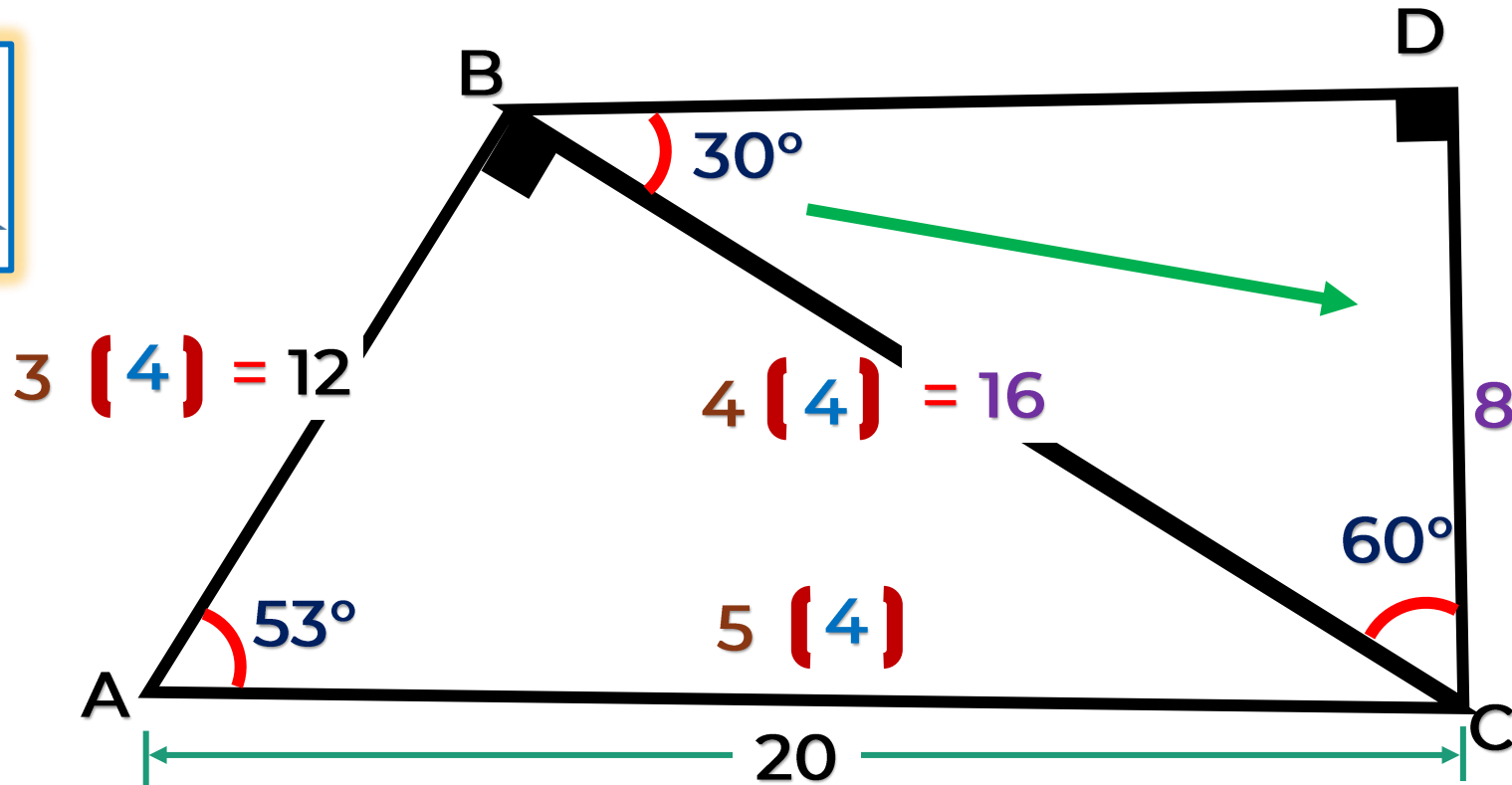
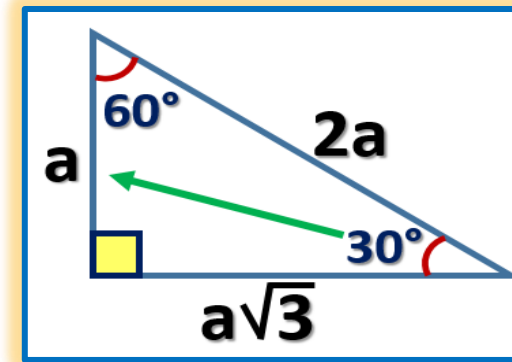
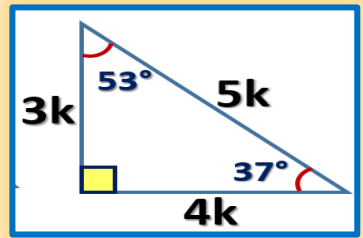
4. Halle AC.



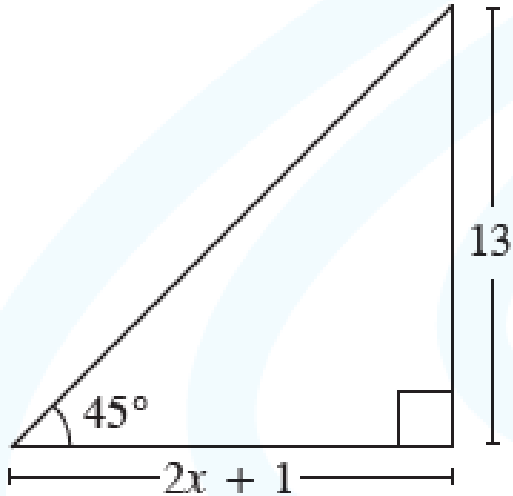
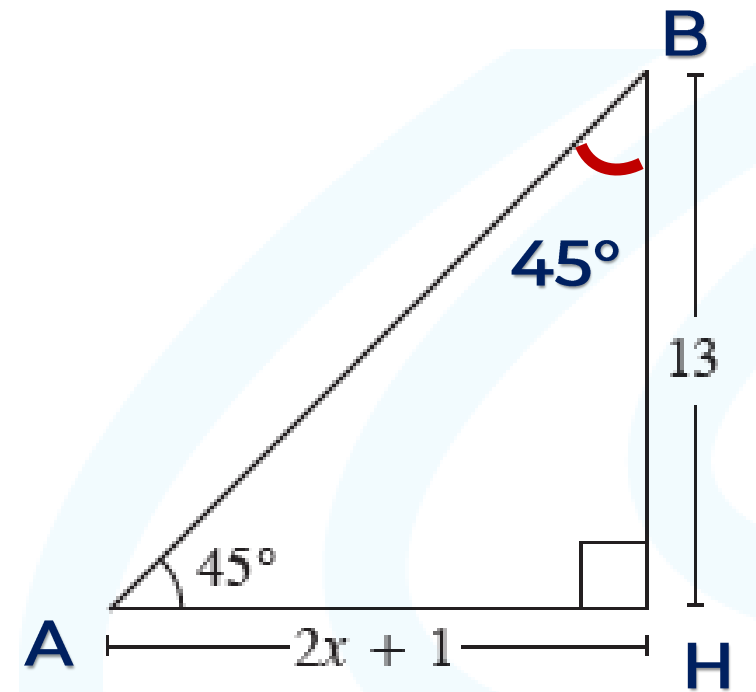
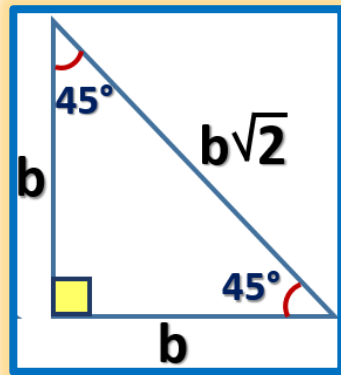
AC = 10



5. Se tienen los triángulos ABC, recto en B, y BCD, recto en D, D exterior relativo a BC. Si $m\angle BAC = 53^\circ$, $m\angle BCD = 60^\circ$ y $AC = 20$, halle CD.



$$AC = 8$$

6. Halle el valor de x .Solución

Sus catetos tienen igual longitud

$$AH = HB$$

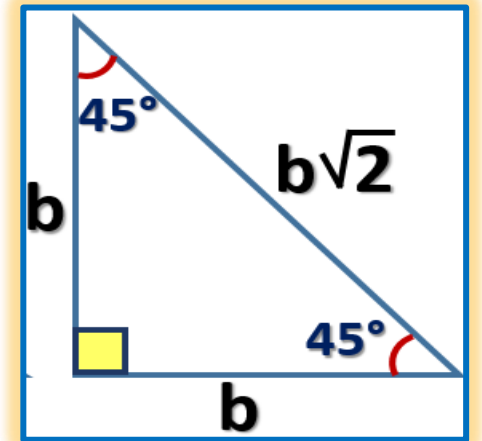
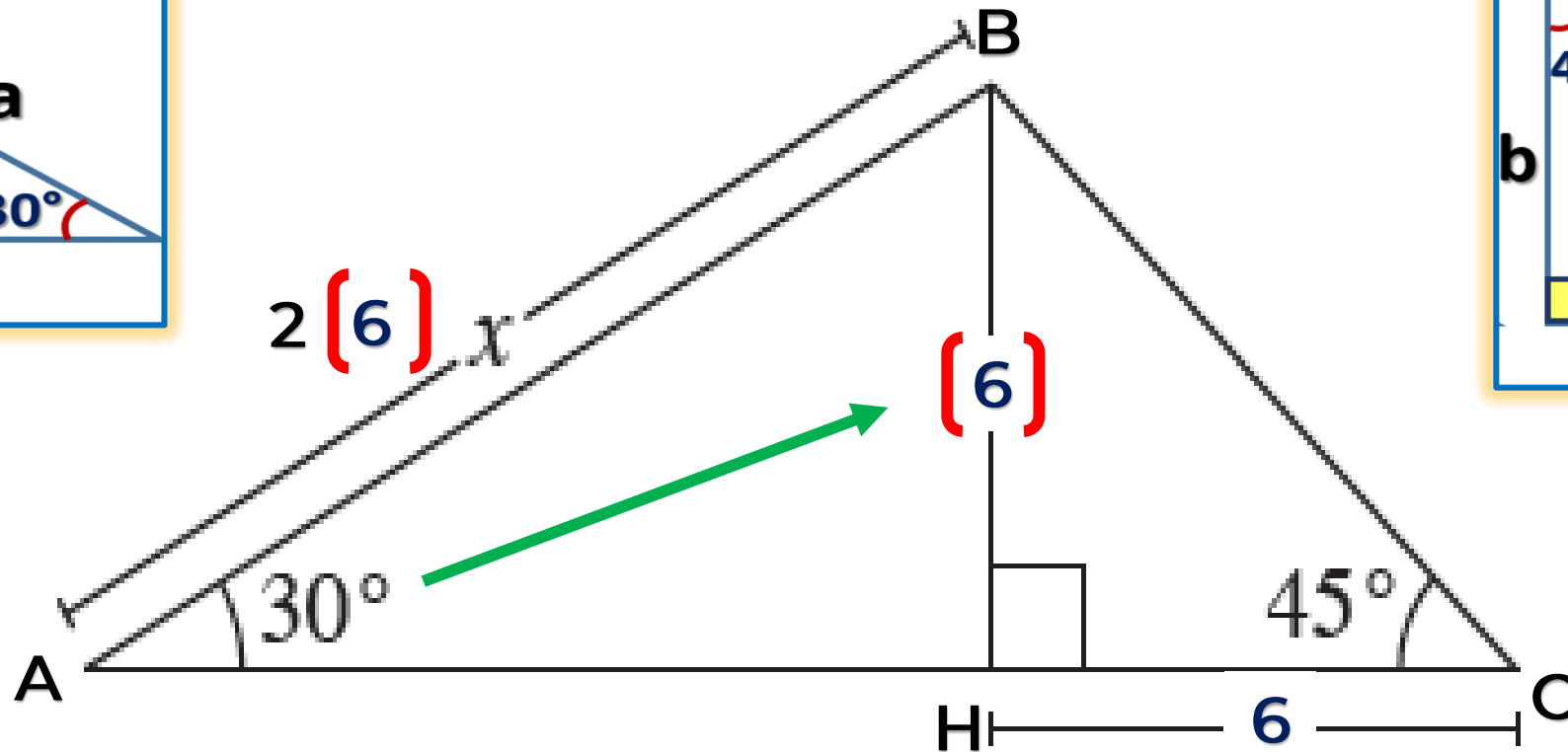
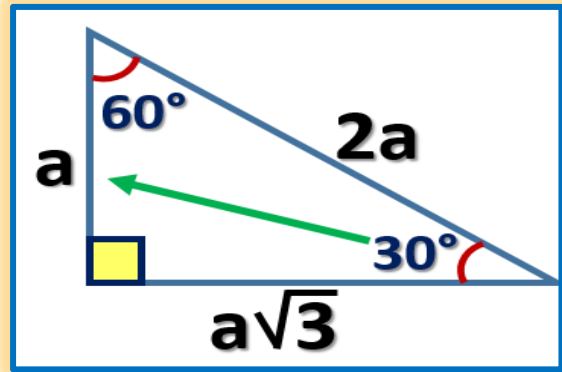
$$2x + 1 = 13$$

$$2x = 12$$

$$x = 6$$



7. Halle el valor de x.

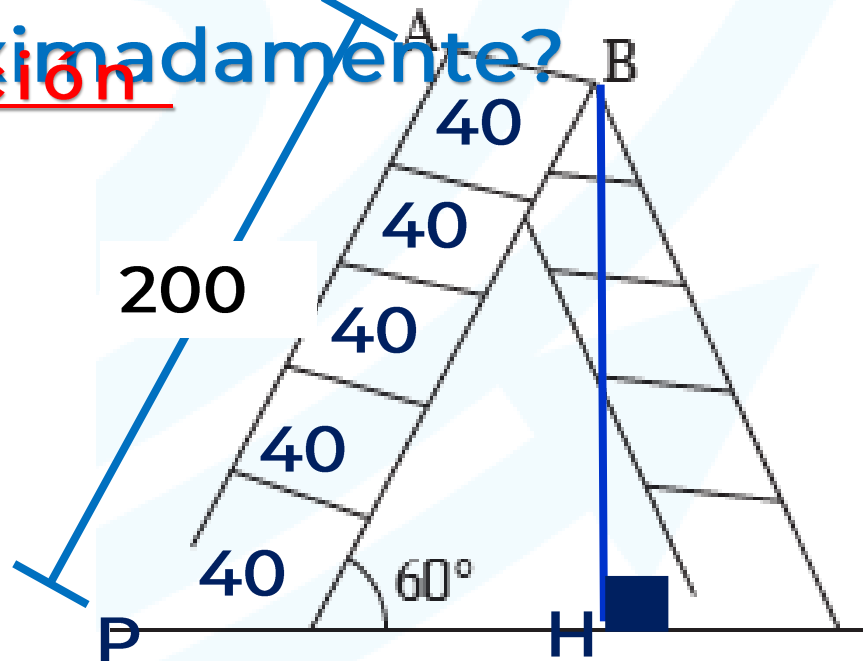


$$CH = BH = 6$$

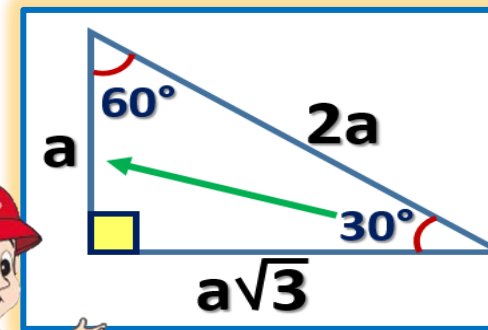
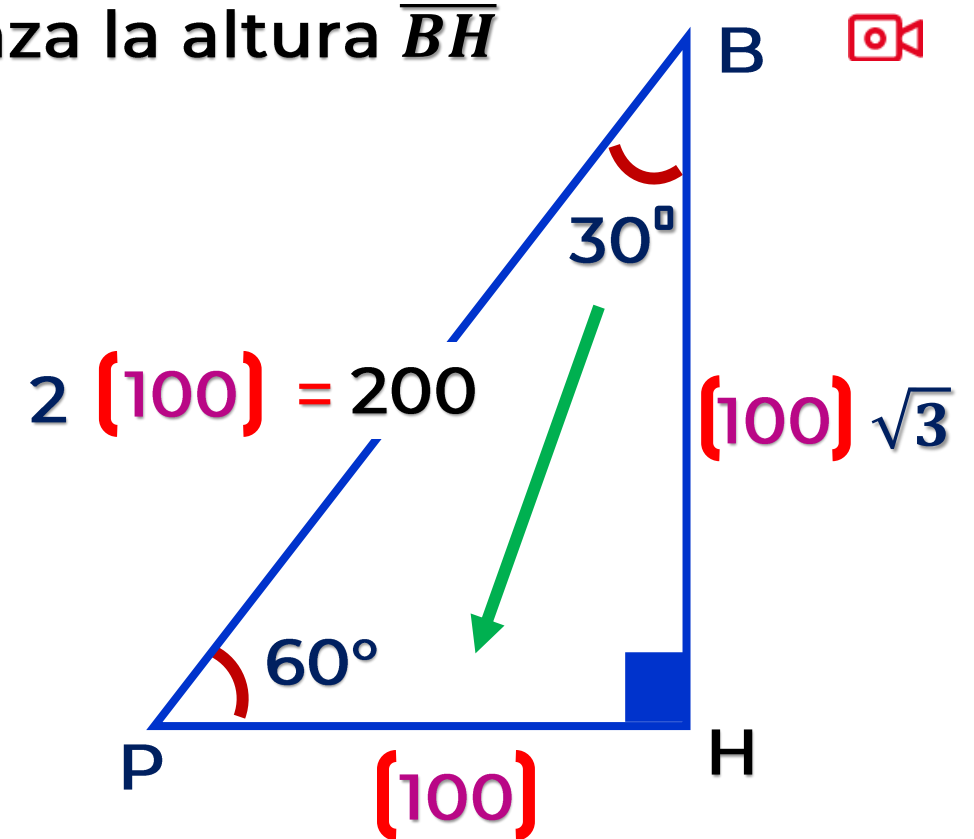
$$x = 12$$

8. Se muestra una escalera, de 4 peldaños equidistantes 40cm, unidos por una bisagra \overline{AB} . ¿A qué altura se encuentra el extremo \overline{AB} aproximadamente?

Solución



Se traza la altura \overline{BH}



$$BH = (100)\sqrt{3}$$

$$h = 100(1,73)$$

$$h = 173 \text{ cm}$$



**SACO
OLIVEROS**

The background features a diagonal split between blue on the left and red on the right. Overlaid on this is a graphic of concentric circles. The circles on the blue side are blue, while those on the red side are red. A large, semi-transparent arrow points from the center of the circles towards the bottom right, crossing the diagonal boundary.