

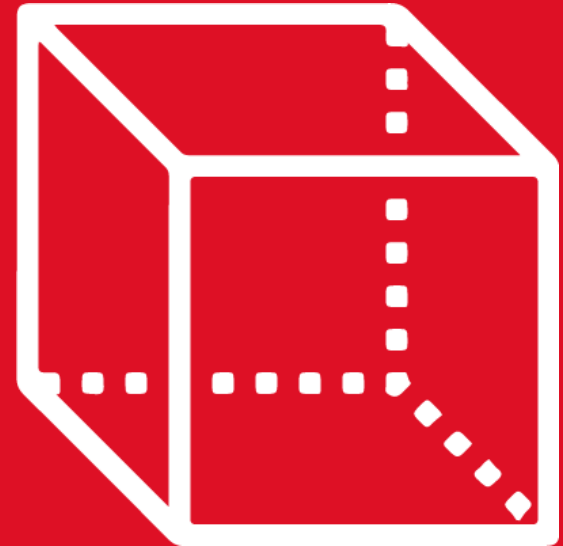
# GEOMETRÍA

## Capítulo 8

1st

SECONDARY

### Triángulos rectángulos notables

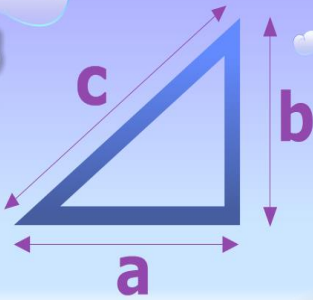



 **SACO OLIVEROS**



# Teorema de Pitágoras

$$a^2 + b^2 = c^2$$

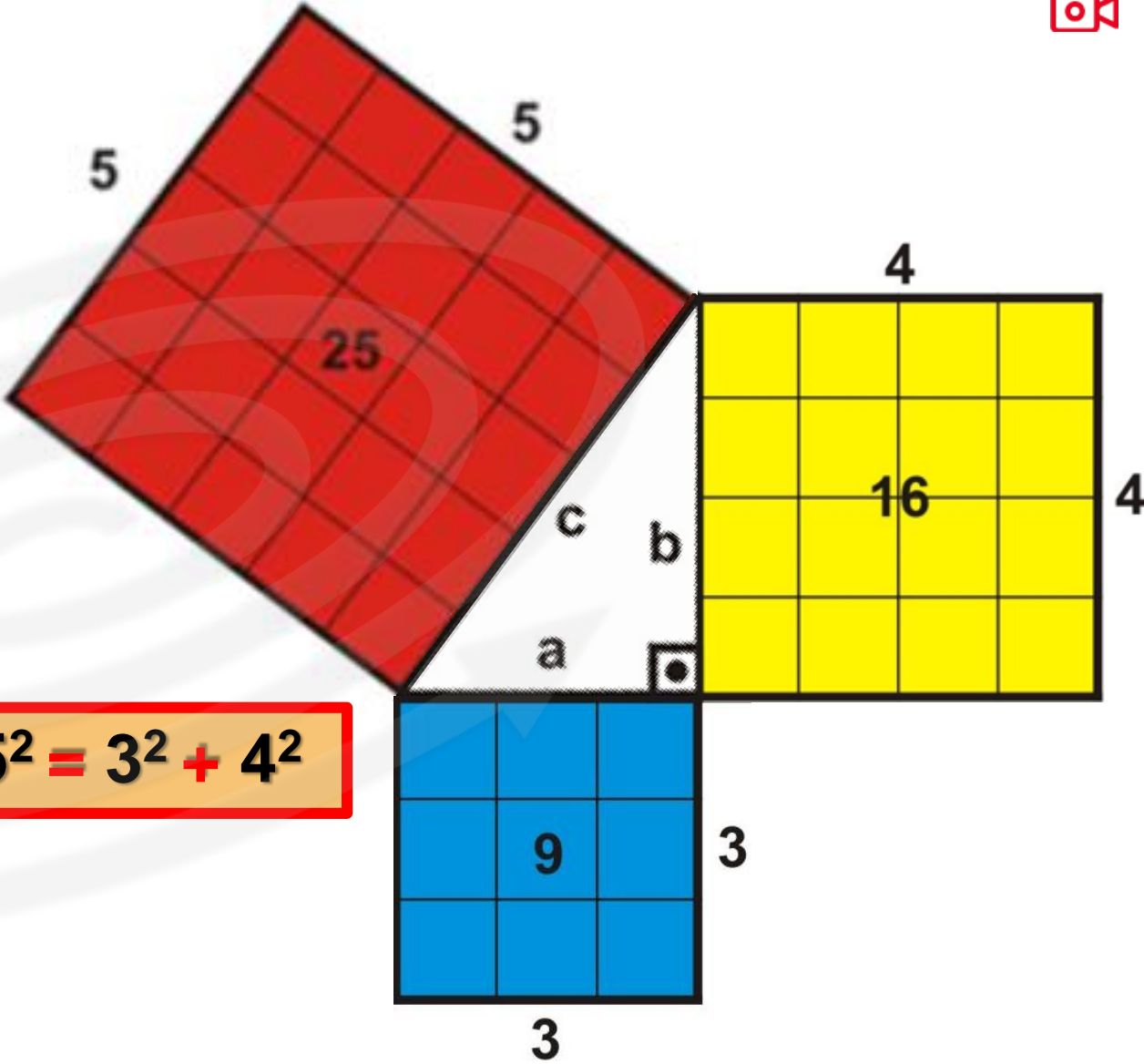




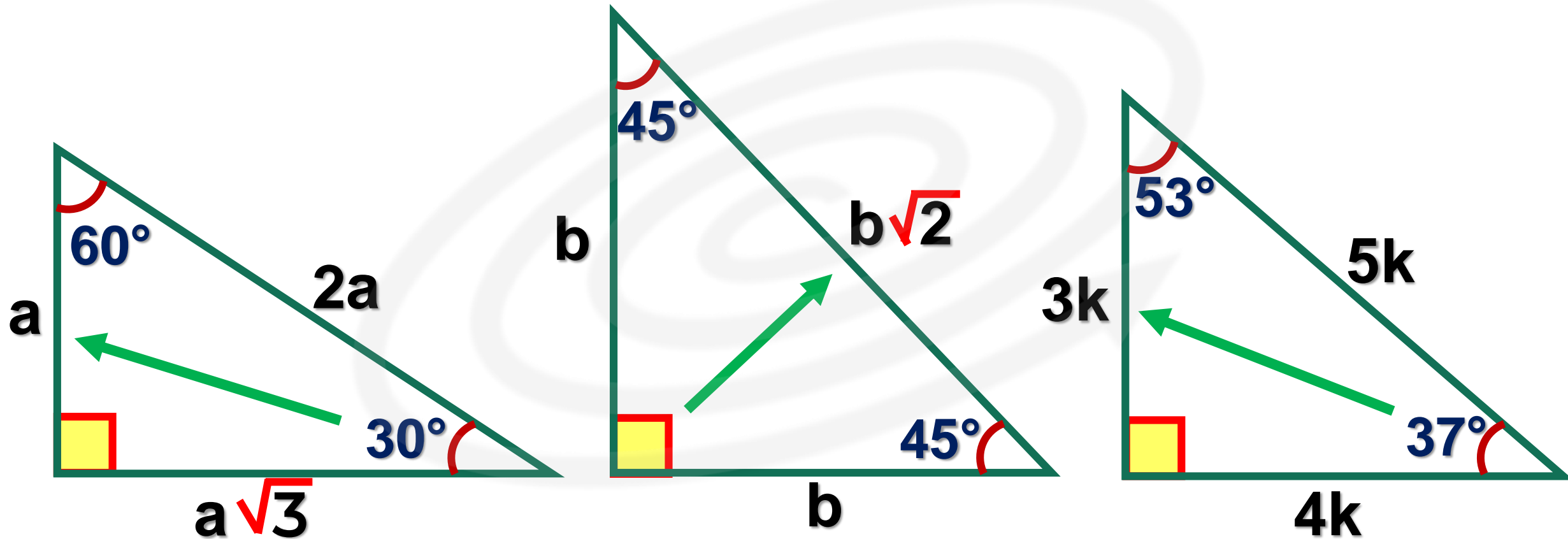
+3 -6 +4 1 0 5 2 8 0 3 6 +6 1 2 +9 +8 +7 -4 +5 7 4 3 9 -8 -2 -3 -5



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

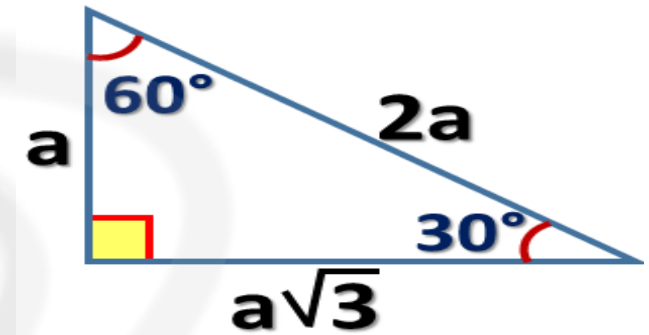
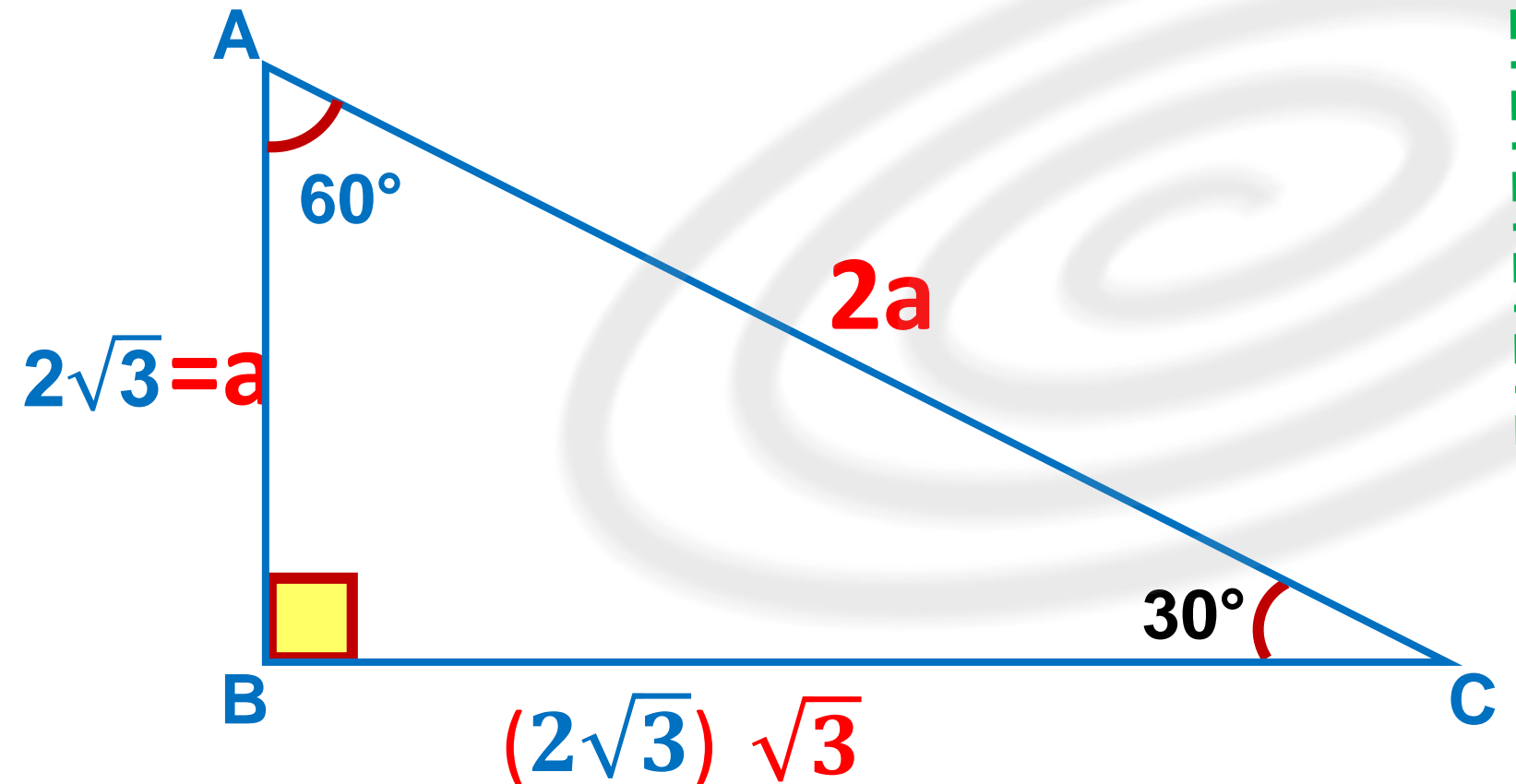


# TRIÁNGULOS RECTÁNGULOS NOTABLES



1. Se tiene un triángulo ABC, recto en B. Si  $AB = 2\sqrt{3}$  m y  $m\angle BAC = 60^\circ$ , halle BC.

### Resolución



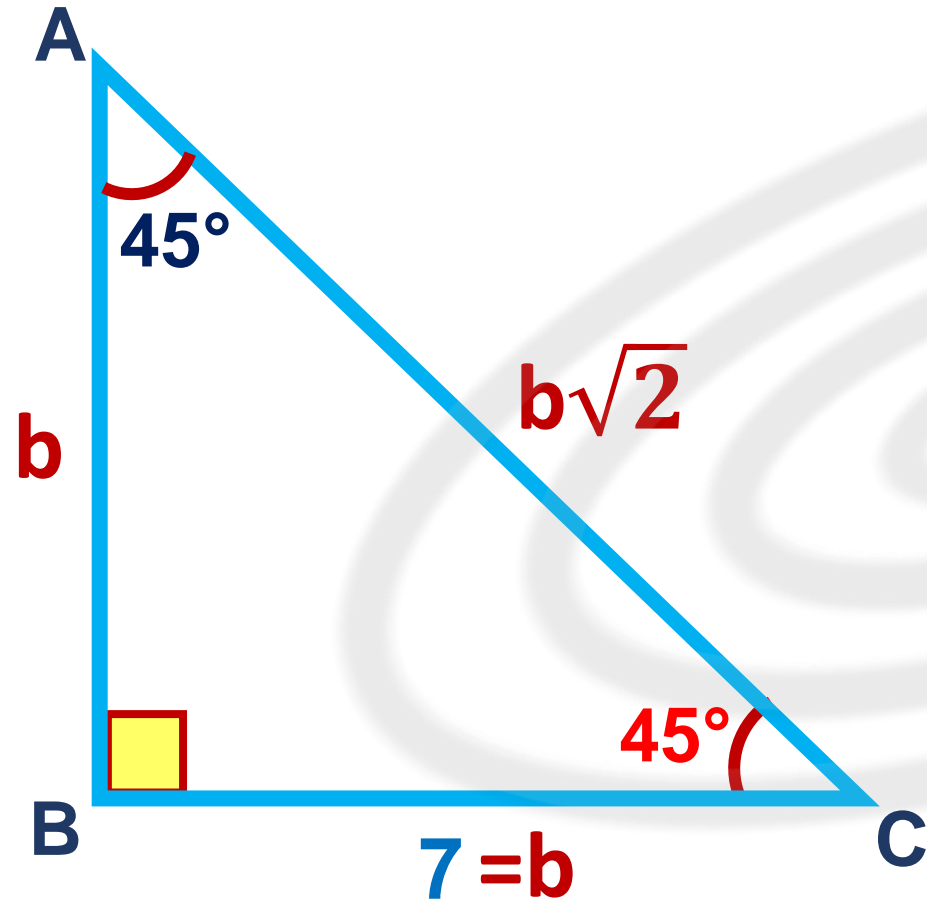
Piden: BC

$$BC = (2\sqrt{3})\sqrt{3}$$

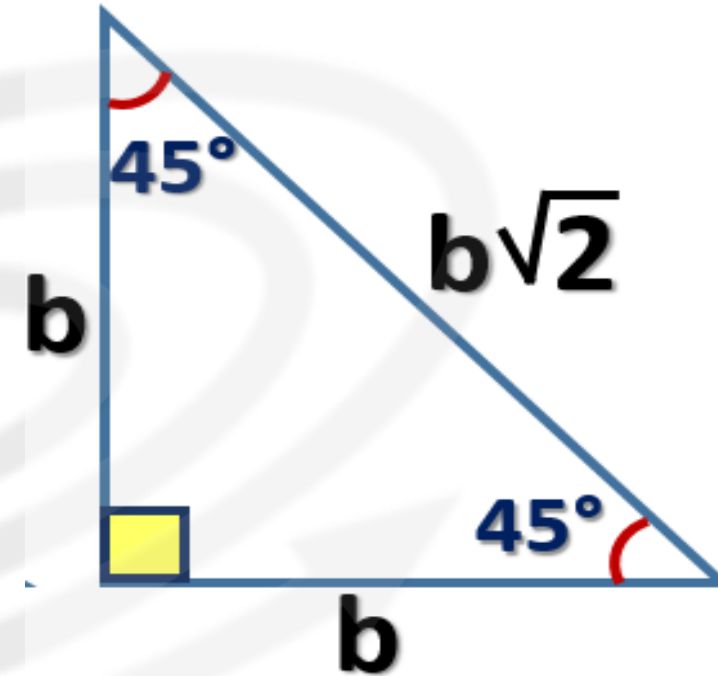
$$BC = 2 \cdot 3$$

$$BC = 6 \text{ m}$$

2. En el gráfico, halle AC.



Resolución

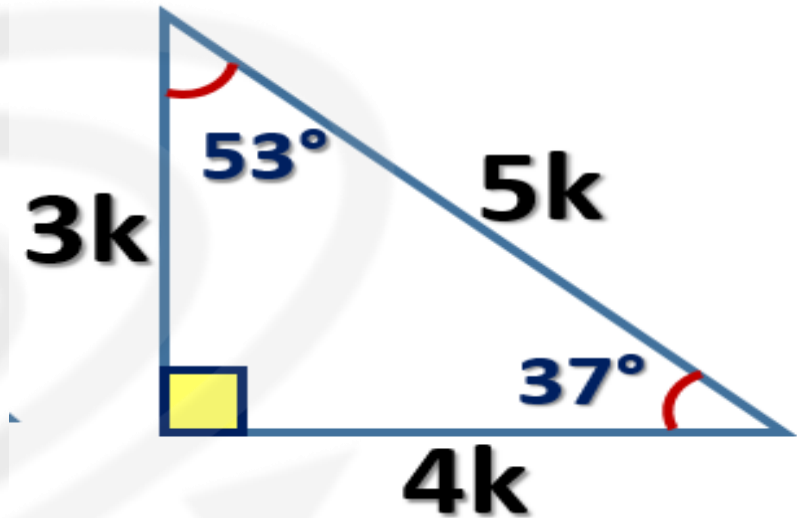
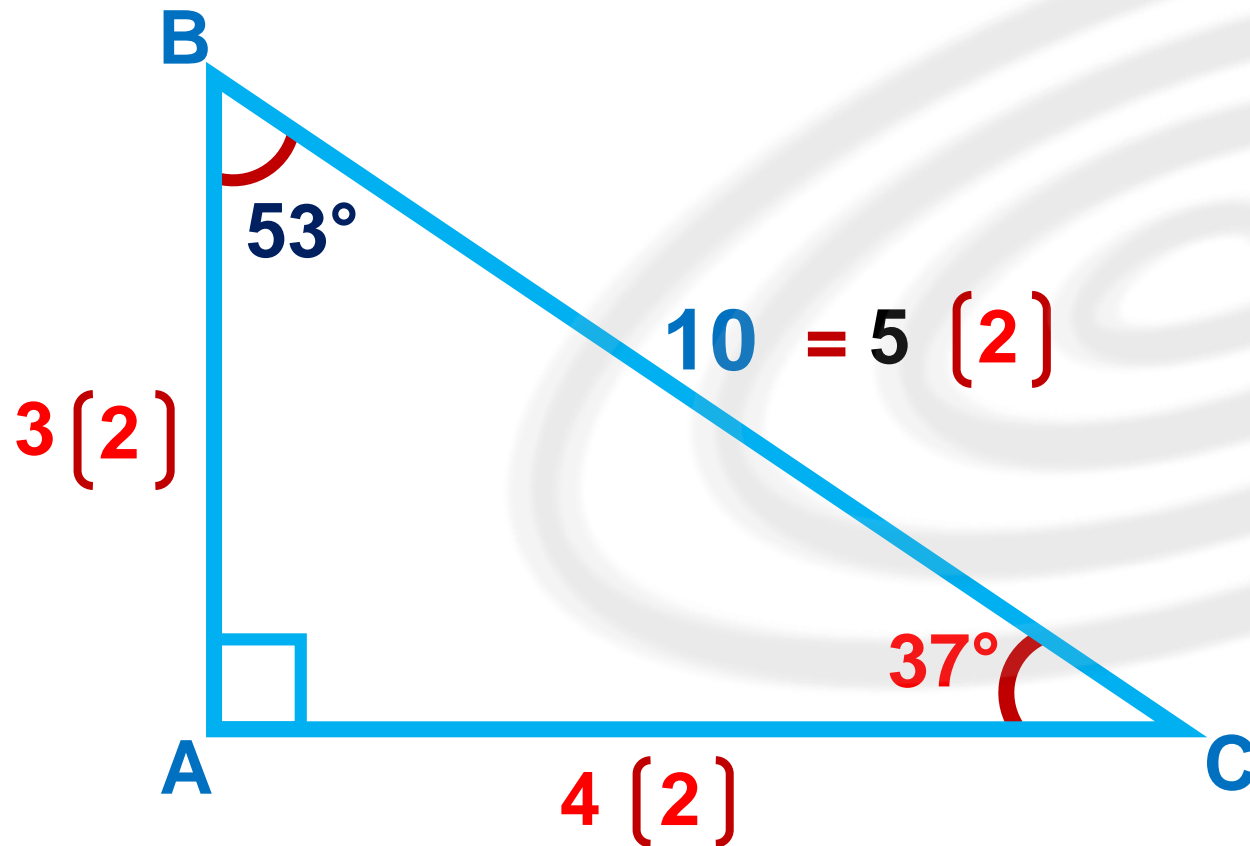


Piden: AC

$$AC = 7\sqrt{2}$$

3.- La longitud de la hipotenusa de un triángulo rectángulo es 10 m y un ángulo agudo mide  $53^\circ$ . Halle la longitud del cateto menor.

### Resolución

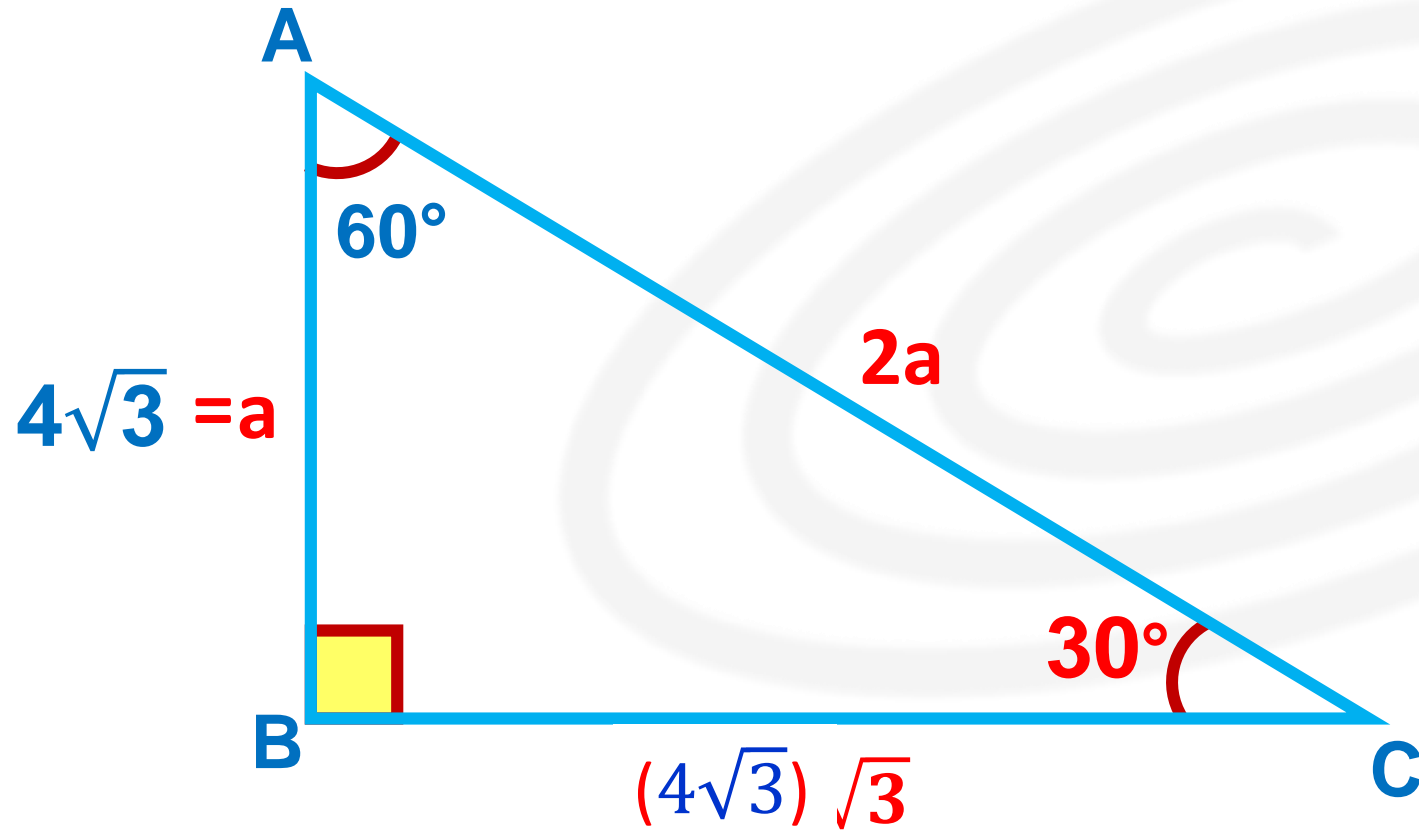


Piden: Cateto menor

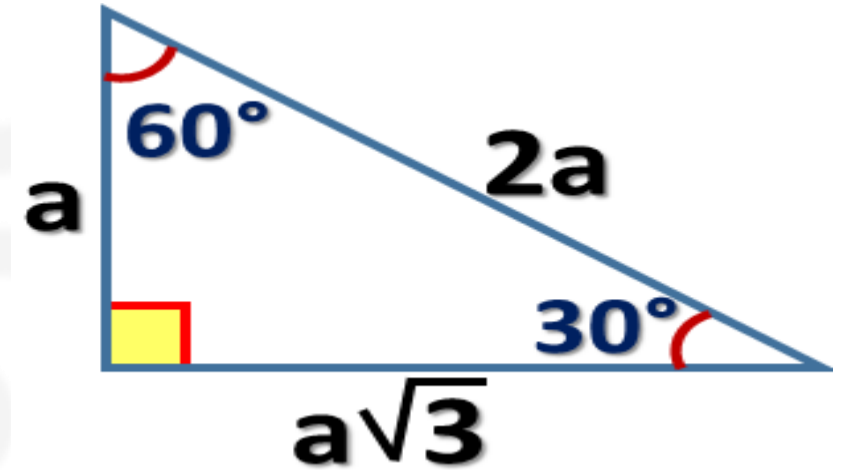
$$AB = 3(2)$$

$$AB = 6 \text{ m}$$

4. En el gráfico, halle BC.



## Resolución



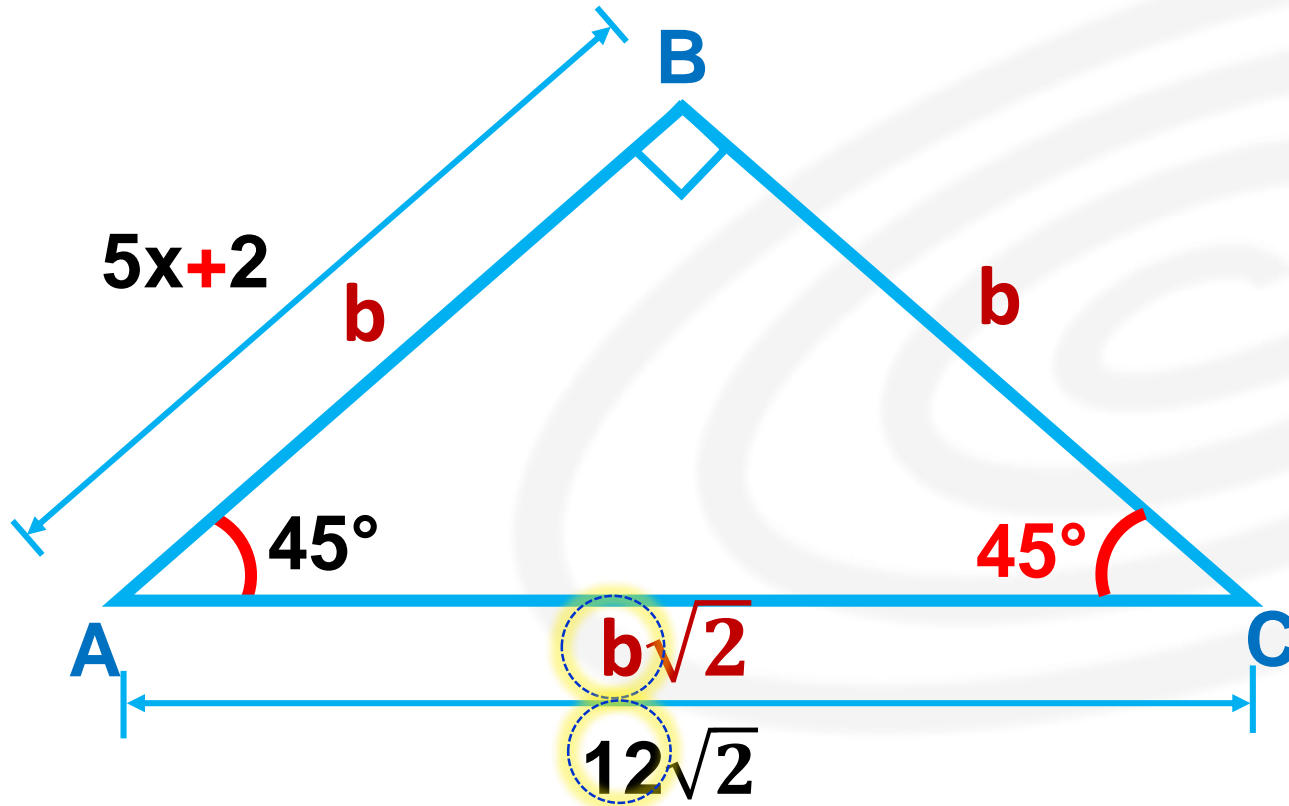
Piden: BC

$$BC = (4\sqrt{3})\sqrt{3}$$

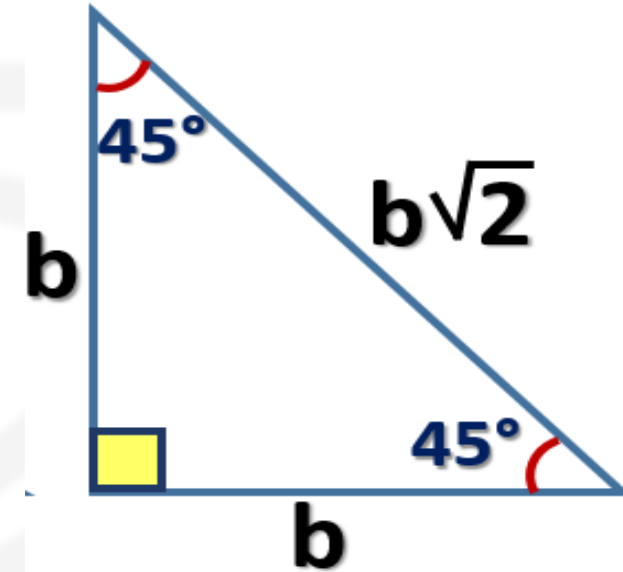
$$BC = 4 \cdot 3$$

$$BC = 12$$

5. En el gráfico, halle el valor de  $x$ .



### Resolución



Piden:  $x$

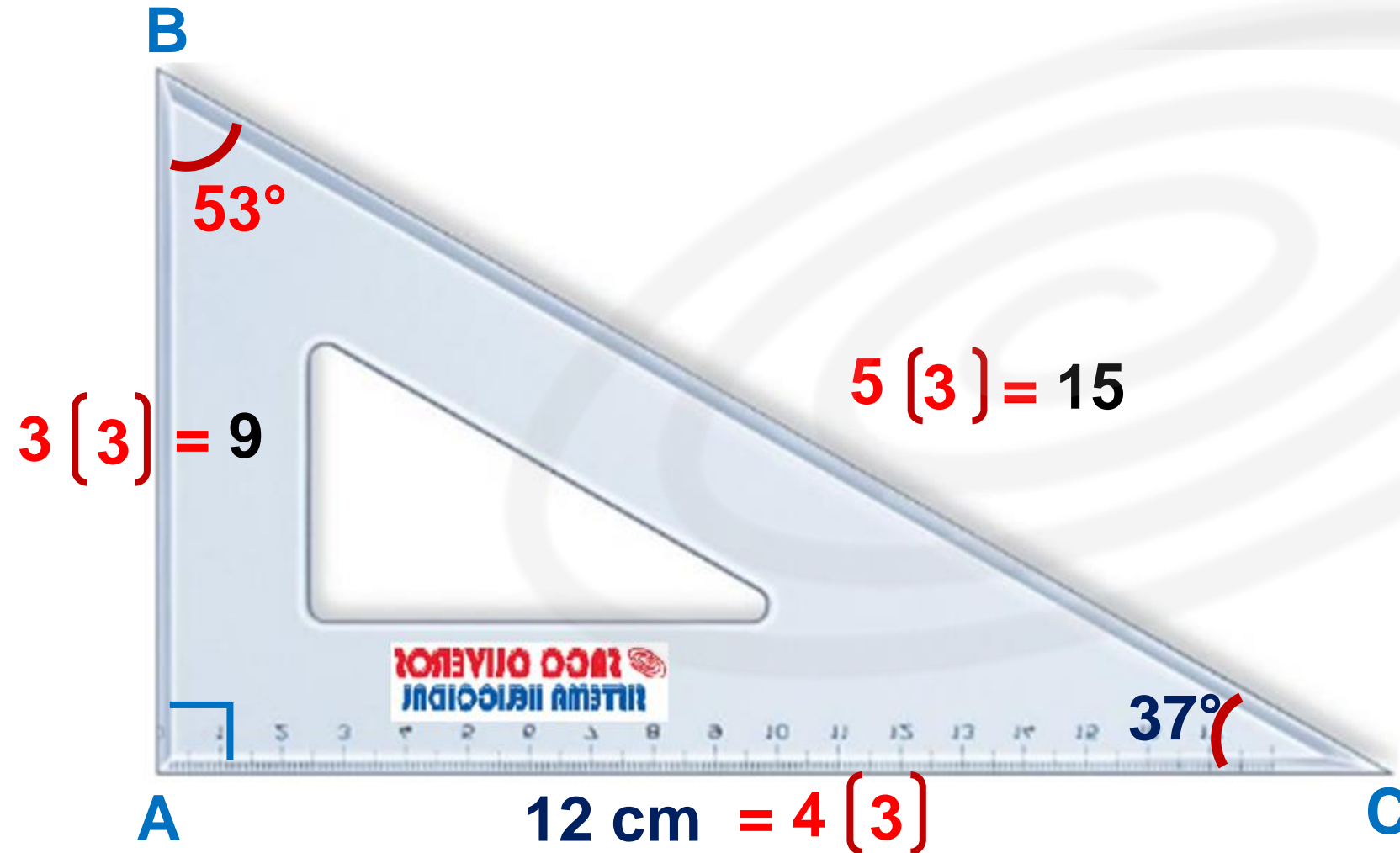
$$5x + 2 = 12$$

$$5x = 10$$

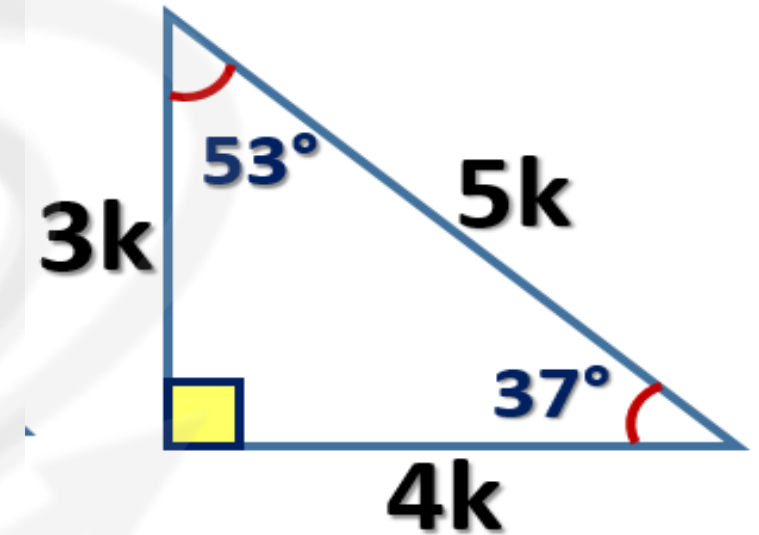
$$x = 2$$



6. En el grafico, halle el perímetro de la escuadra mostrada.



### Resolución

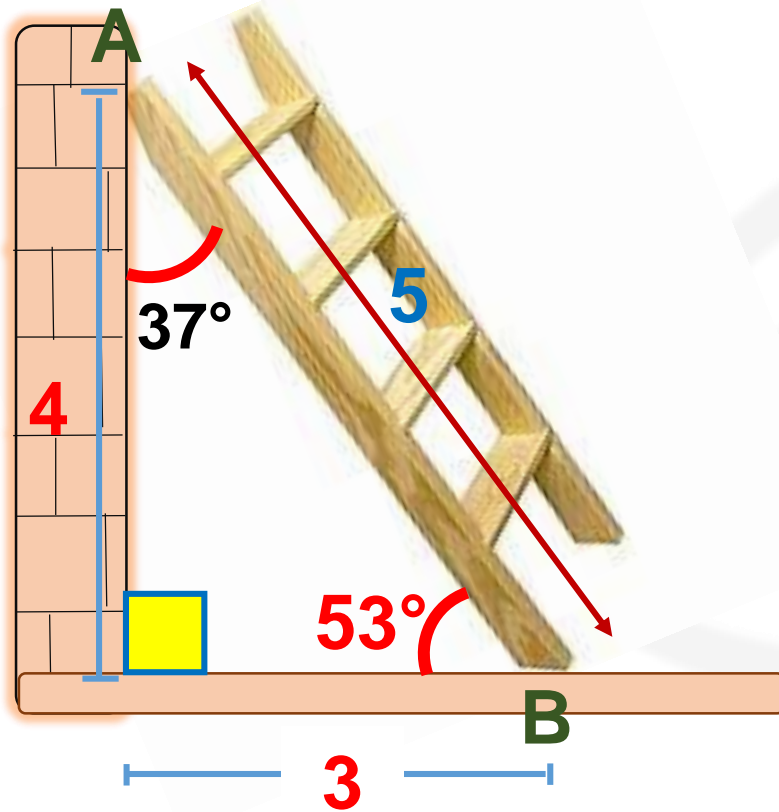


Piden:  $2p_{(ABC)}$

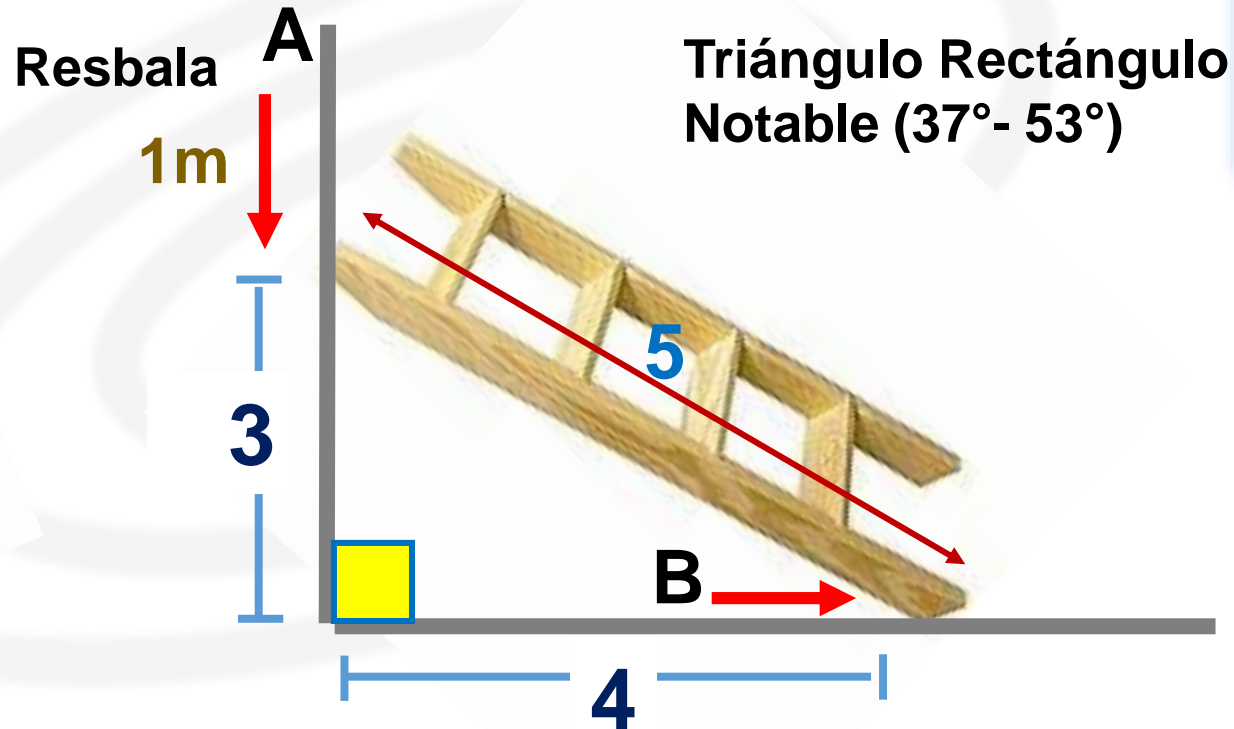
$$2p_{(ABC)} = 9 + 15 + 12$$

$$2p_{(ABC)} = 36 \text{ cm}$$

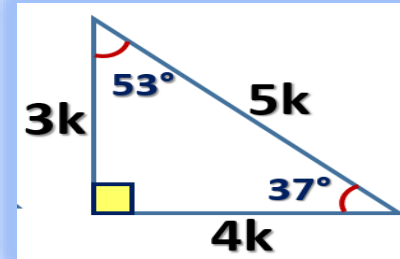
7. En la figura se muestra una escalera de 5 m, apoyada sobre una pared. Si el punto A resbala 1 m, ¿cuánto resbala el punto B?



### Resolución



Triángulo Rectángulo  
Notable ( $37^\circ$ -  $53^\circ$ )



**Resbala = 1 m**