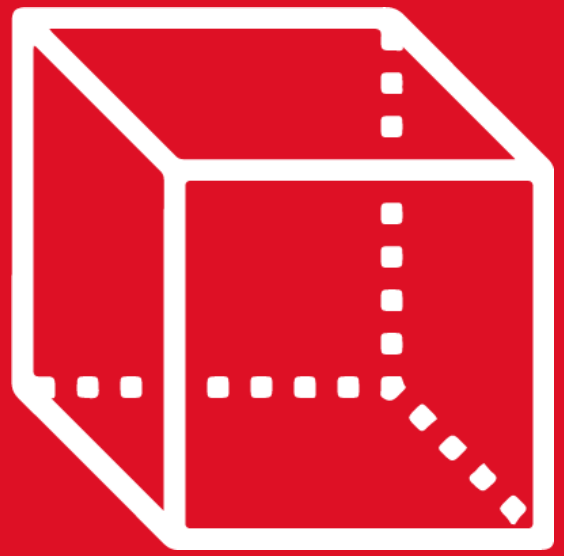
GEOMETRÍA

Capítulo 3

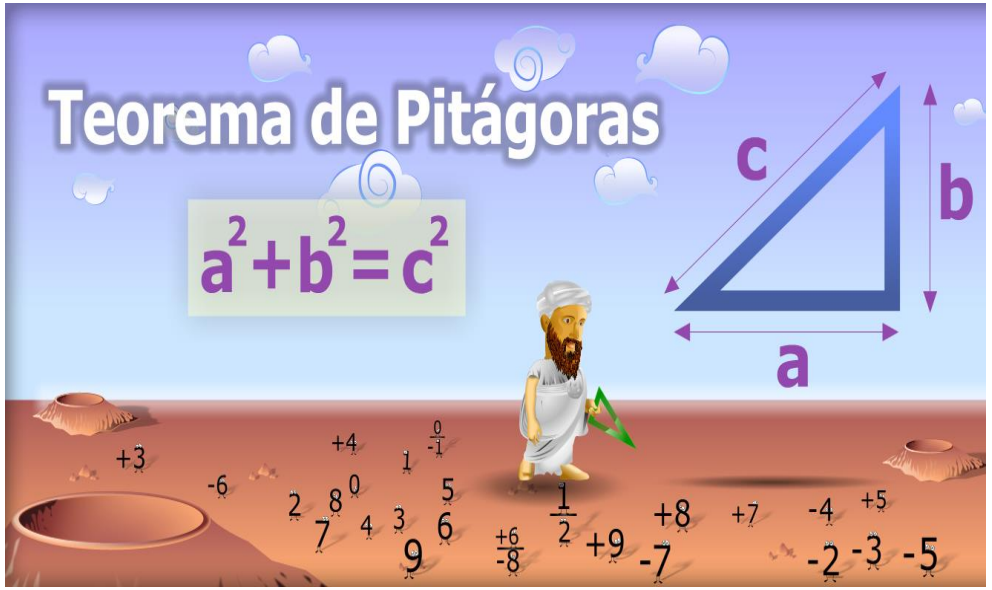


1st
SECONDARY

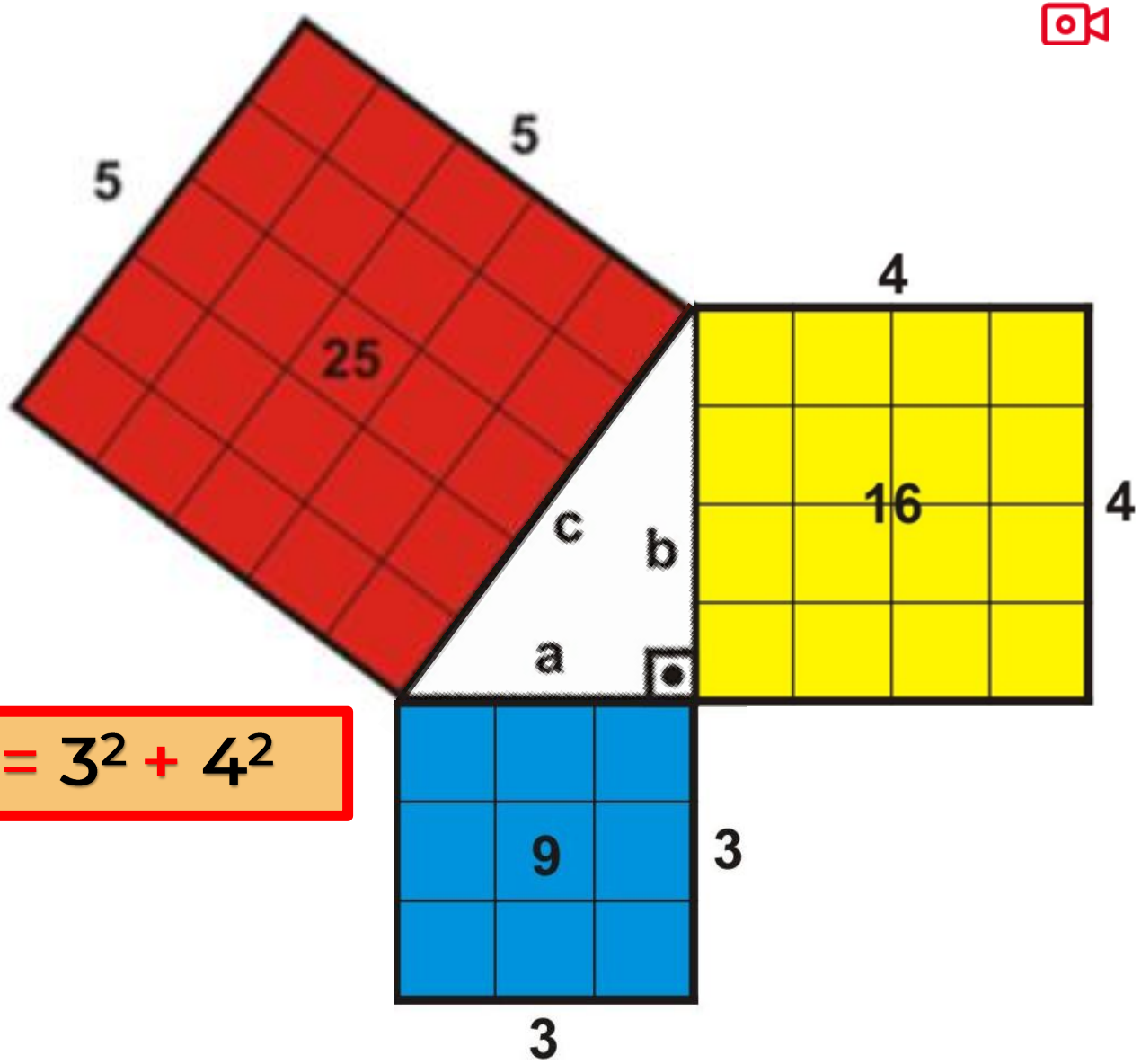
Ses II

Triángulos Rectángulos Notables

SACO OLIVEROS

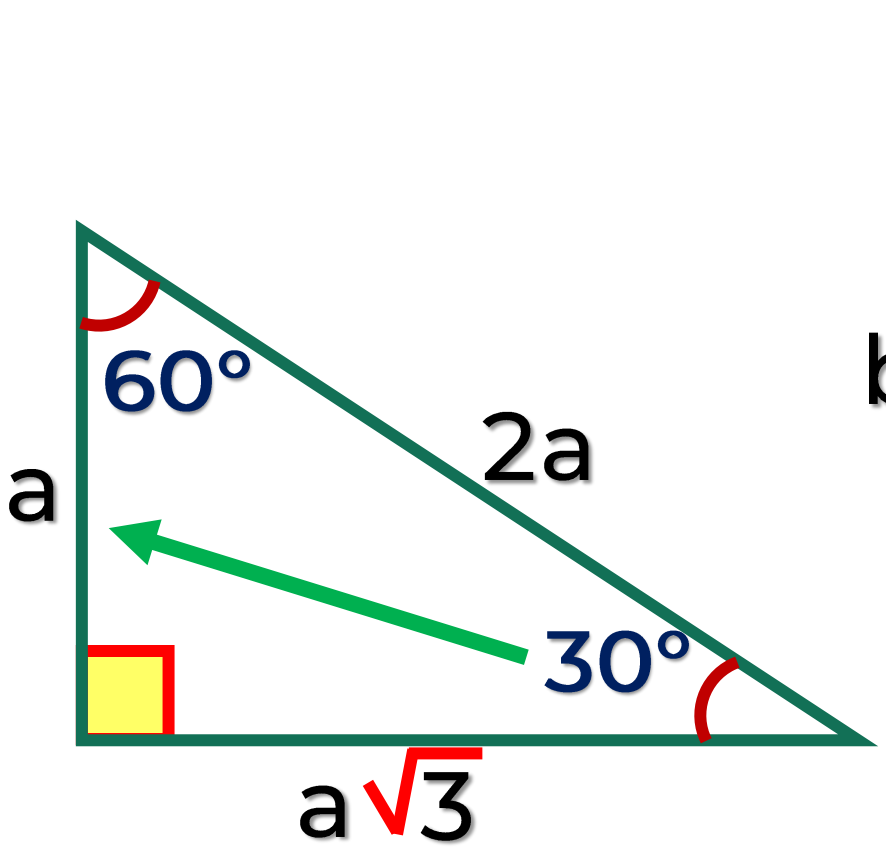

Teorema de Pitágoras
$a^2+b^2=c^2$
c
b
a

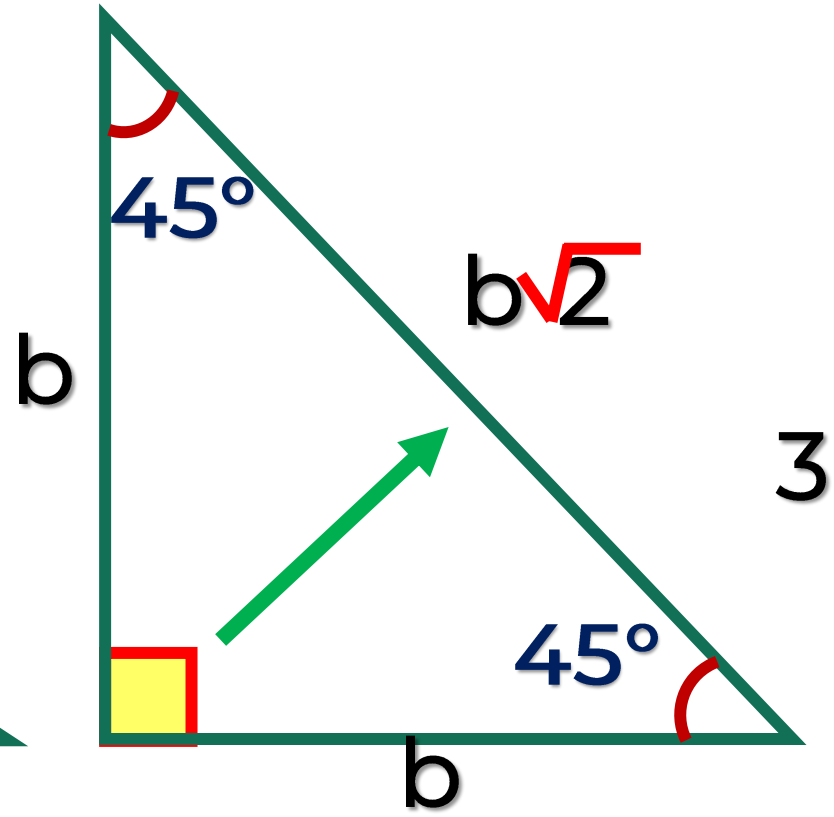

ME LIMPIAS TODO PITÁGORAS

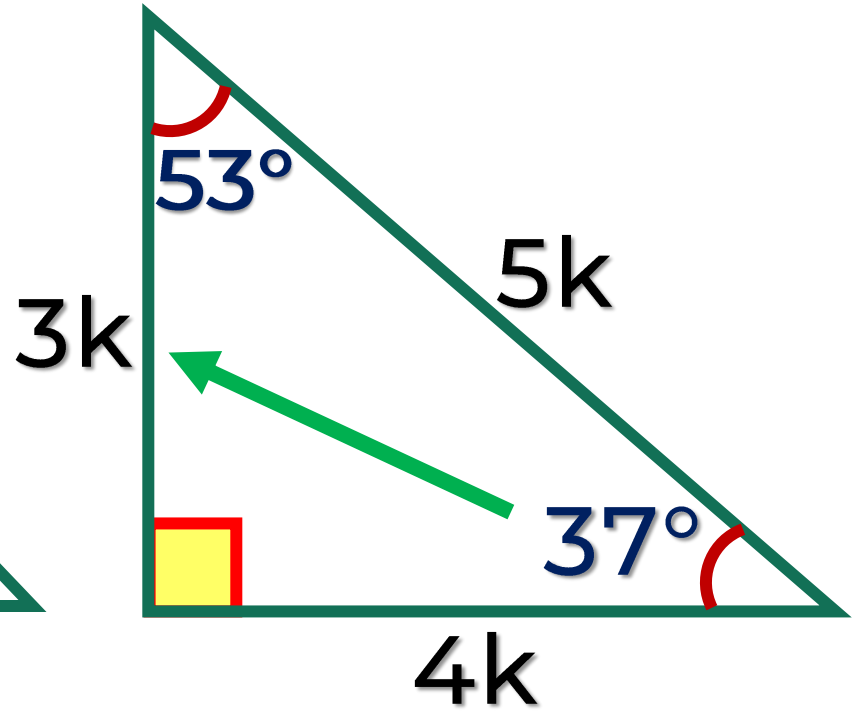

5
5
25
4
4
16
c
b
a
3
9
3

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

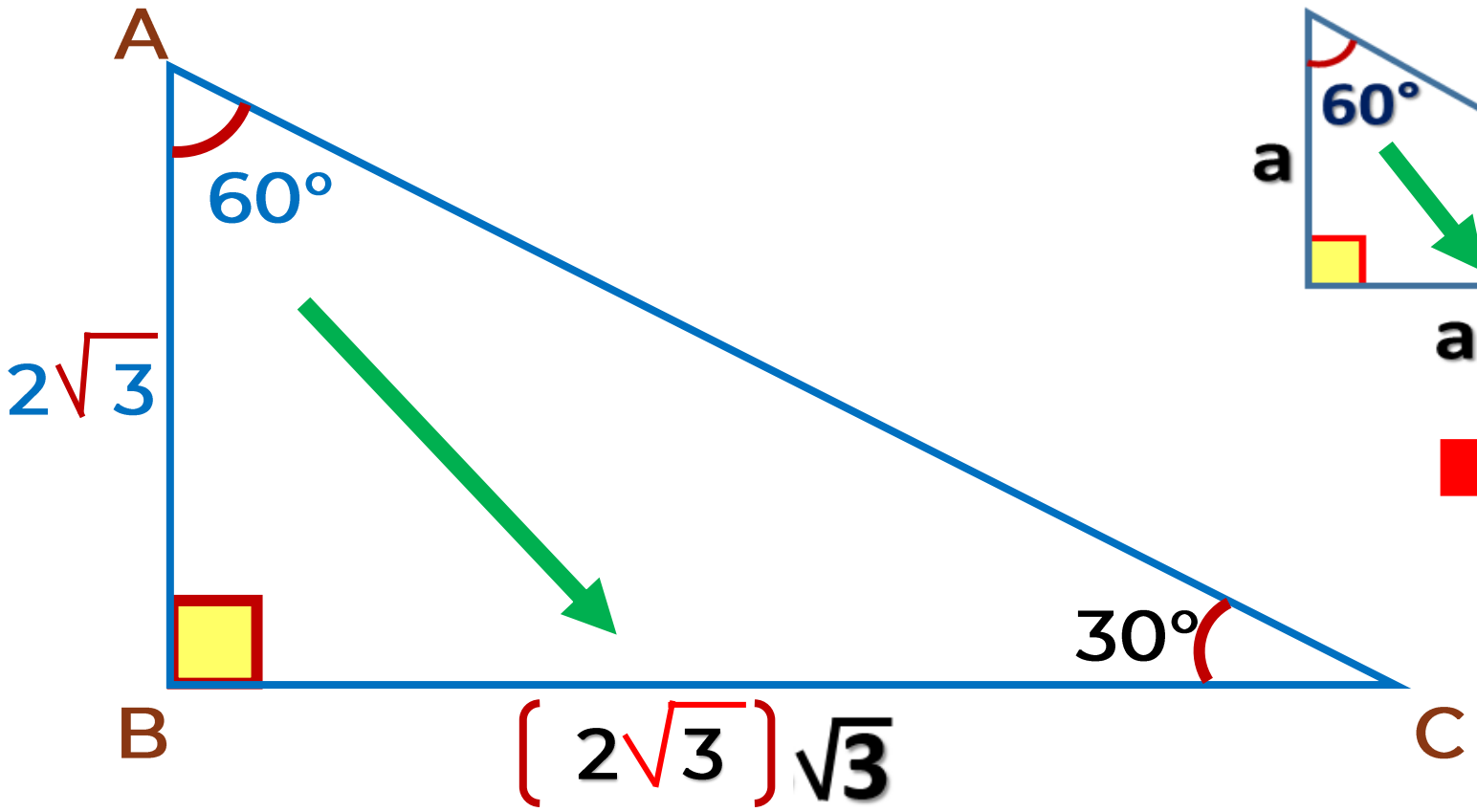
TRIÁNGULOS RECTÁNGULOS NOTABLES

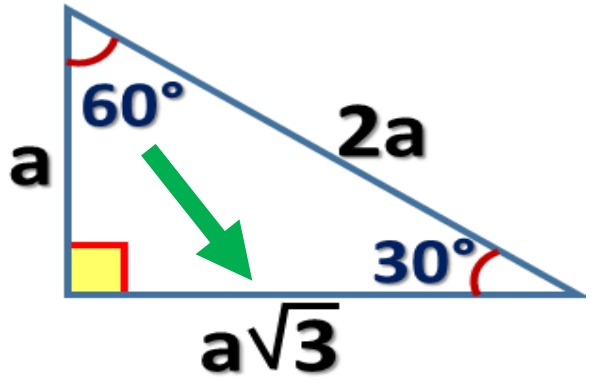






1. Se tiene un triángulo ABC, recto en B. Si AB = $2\sqrt{3}$ m y m<BAC = 60°, halle BC.



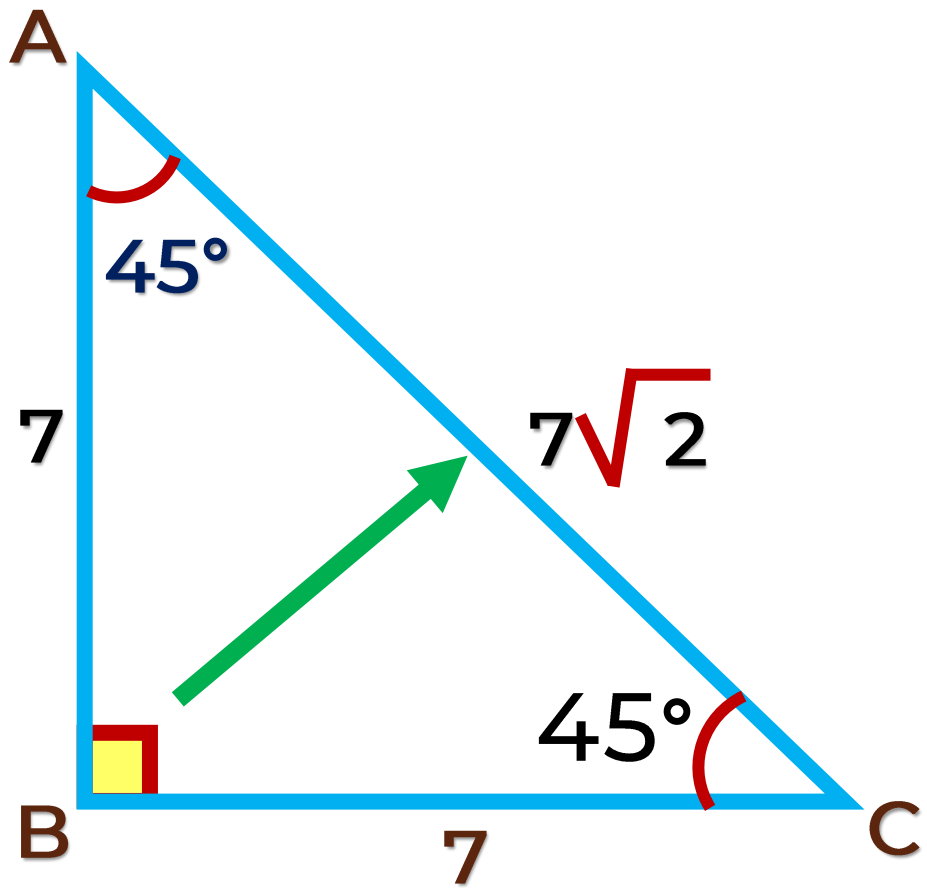


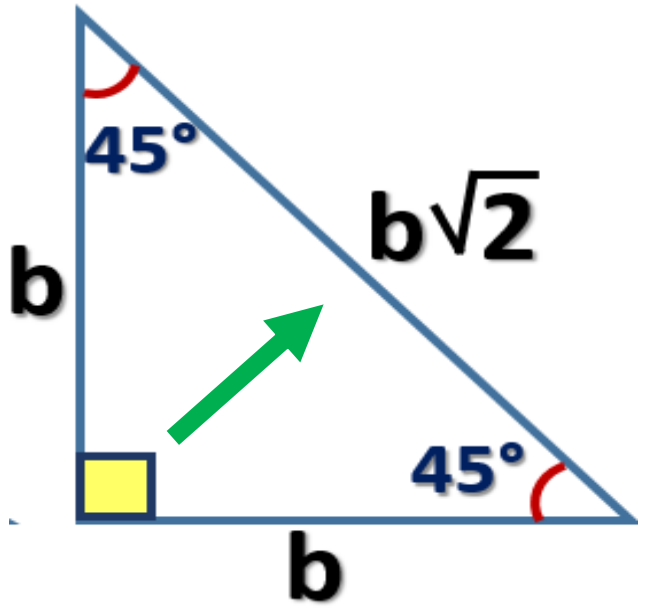
$BC = (2\sqrt{3})\sqrt{3}$

$BC = 2.3$

$BC = 6$

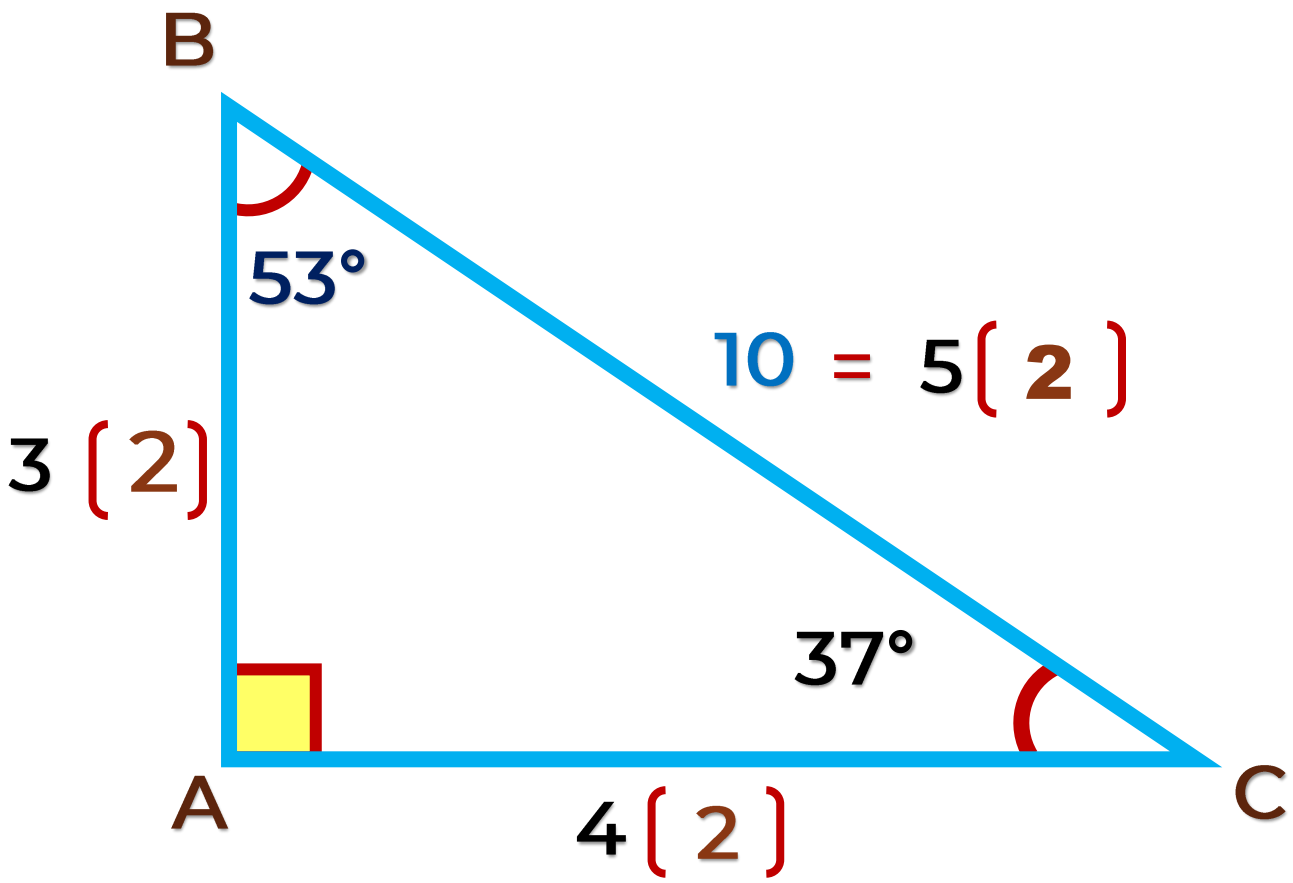
2. En el gráfico, halle AC.

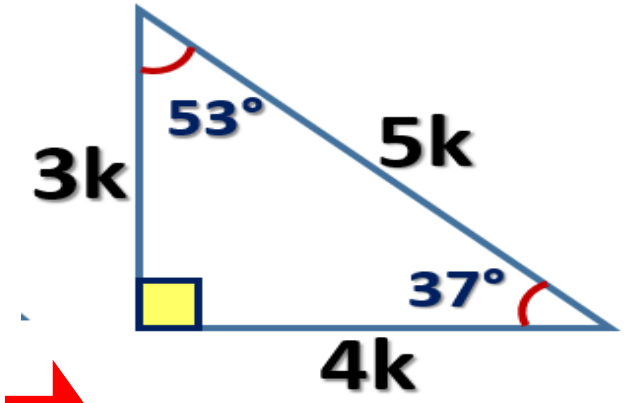




$AC = 7\sqrt{2}$

3. La longitud de la hipotenusa de un triángulo rectángulo es 10 y un ángulo agudo mide 53°. Halle la longitud del cateto menor.

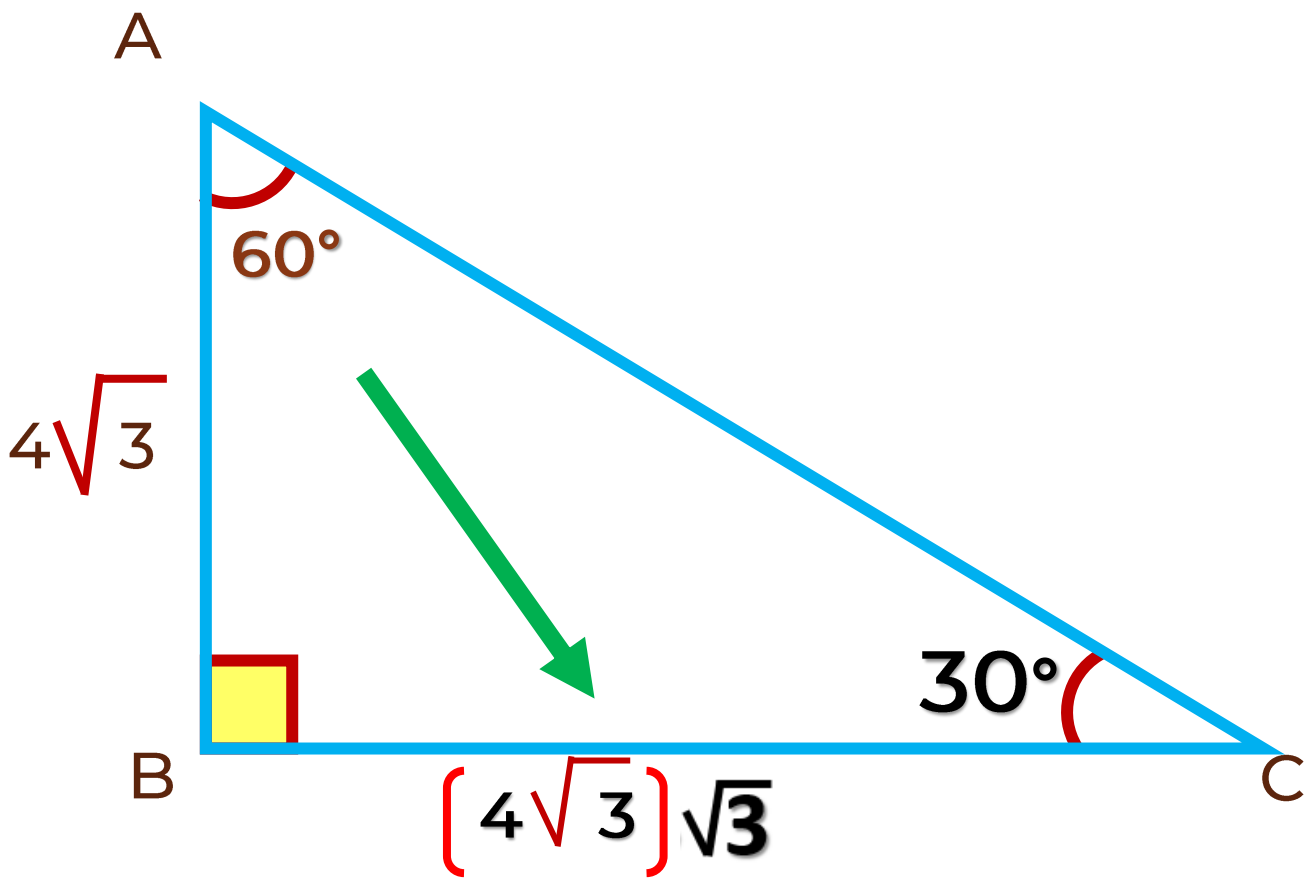


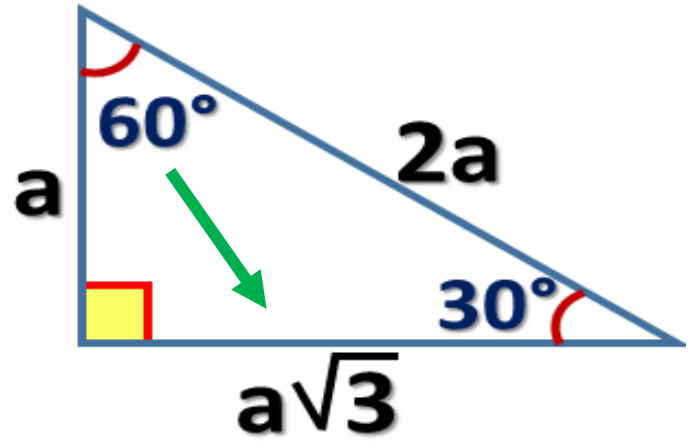


AB = 3 (2)

AB = 6

4. En el gráfico, halle BC.



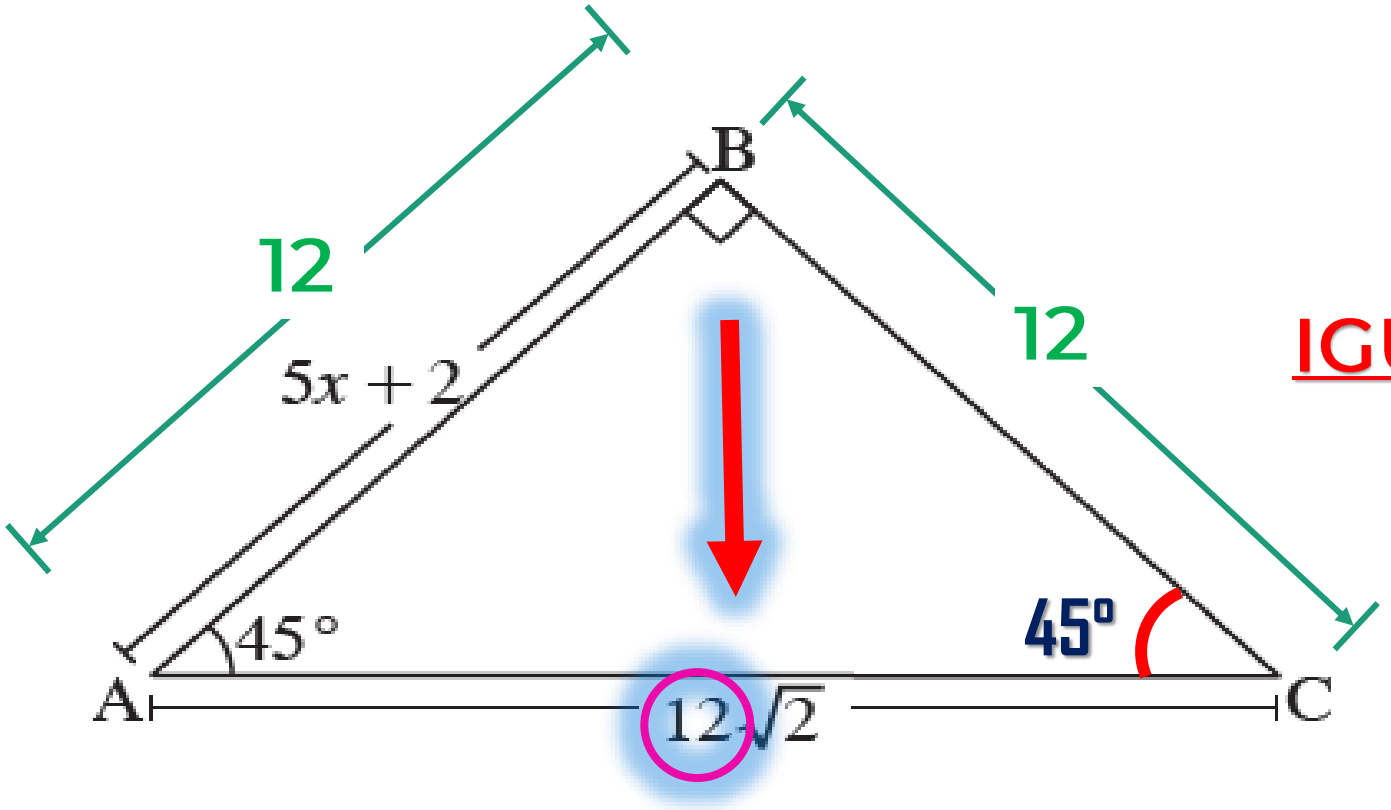


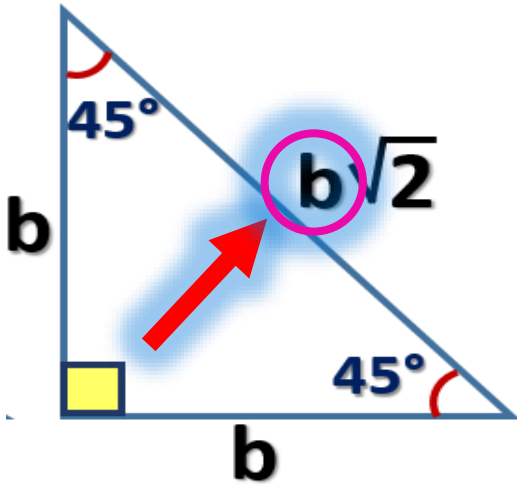
$$BC = 4\sqrt{3}(\sqrt{3})$$

$$BC = 4 \cdot 3$$

BC = 12

5. Halle el valor de x.





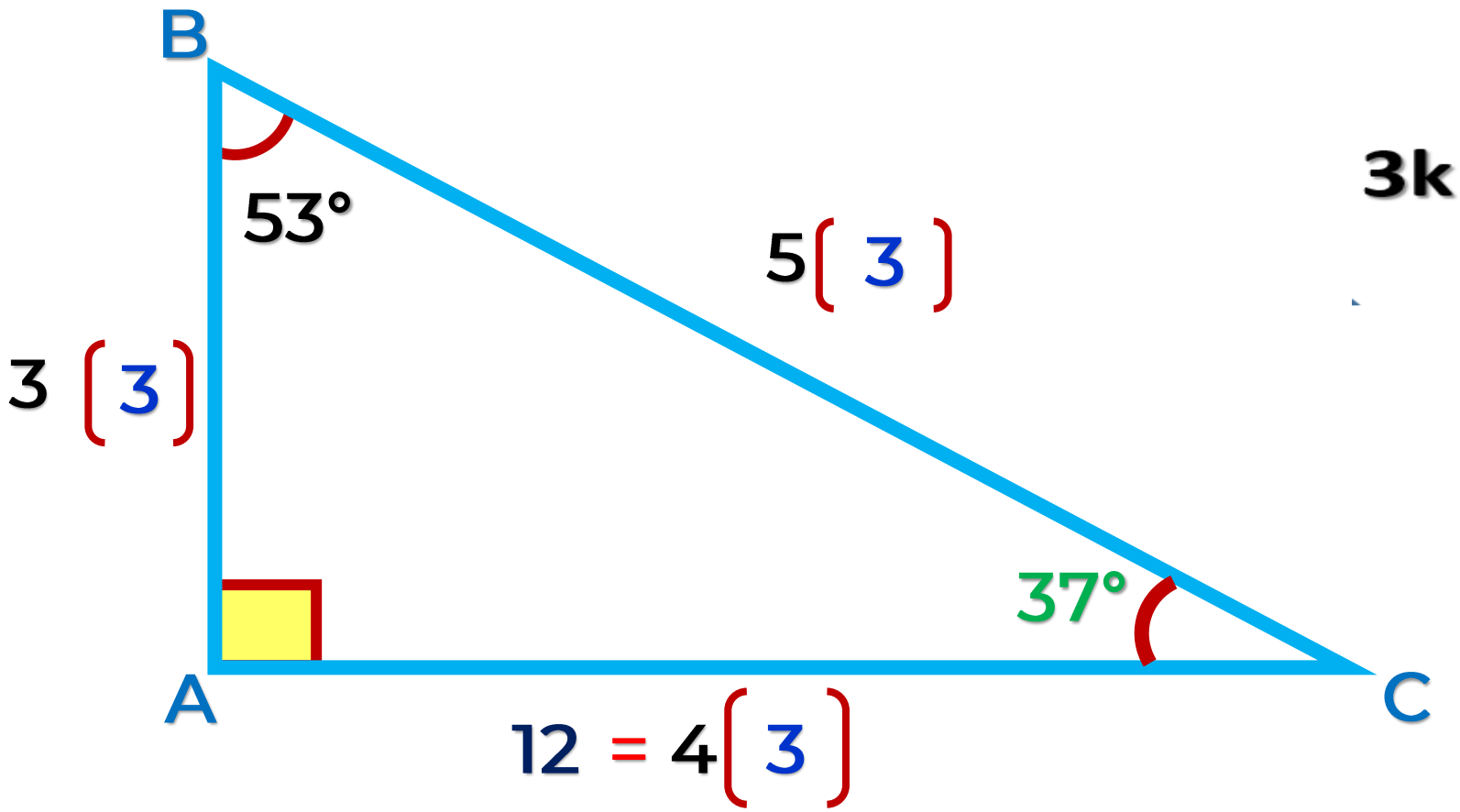
IGUALANDO

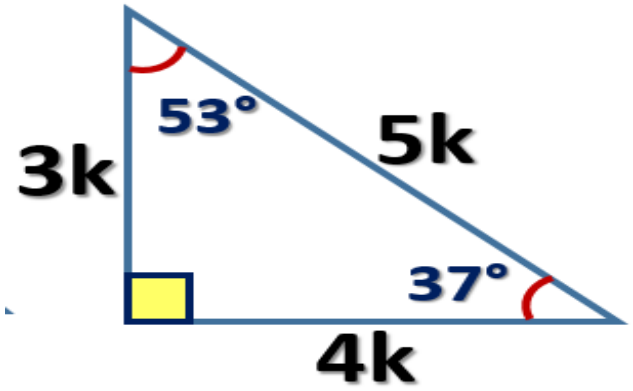
$5x + 2 = 12$

$5x = 10$

$x = 2$

6. En el gráfico, halle AB.

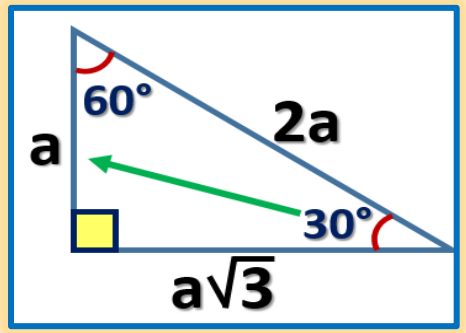


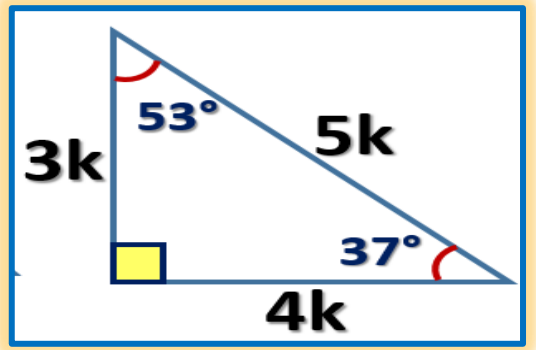


$AB = 3(3)$

$AB = 9$

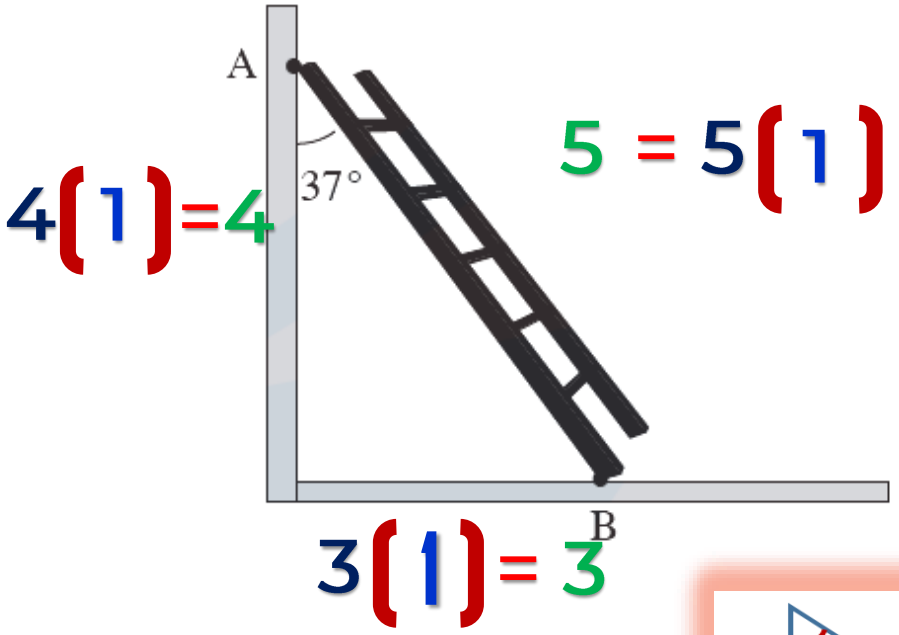
7. La hipotenusa de un triángulo rectángulo ABC, recto en B, mide 10m. Se ubica un punto E exterior relativo a BC, tal que m∢BCE = 37°, m∢ACB = 30° y m∢BEC = 90°. Halle BE.

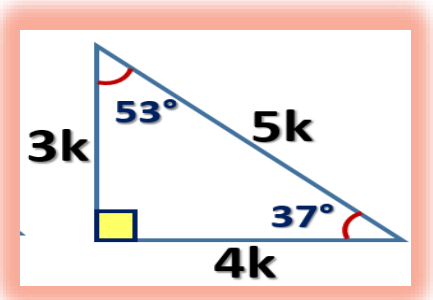




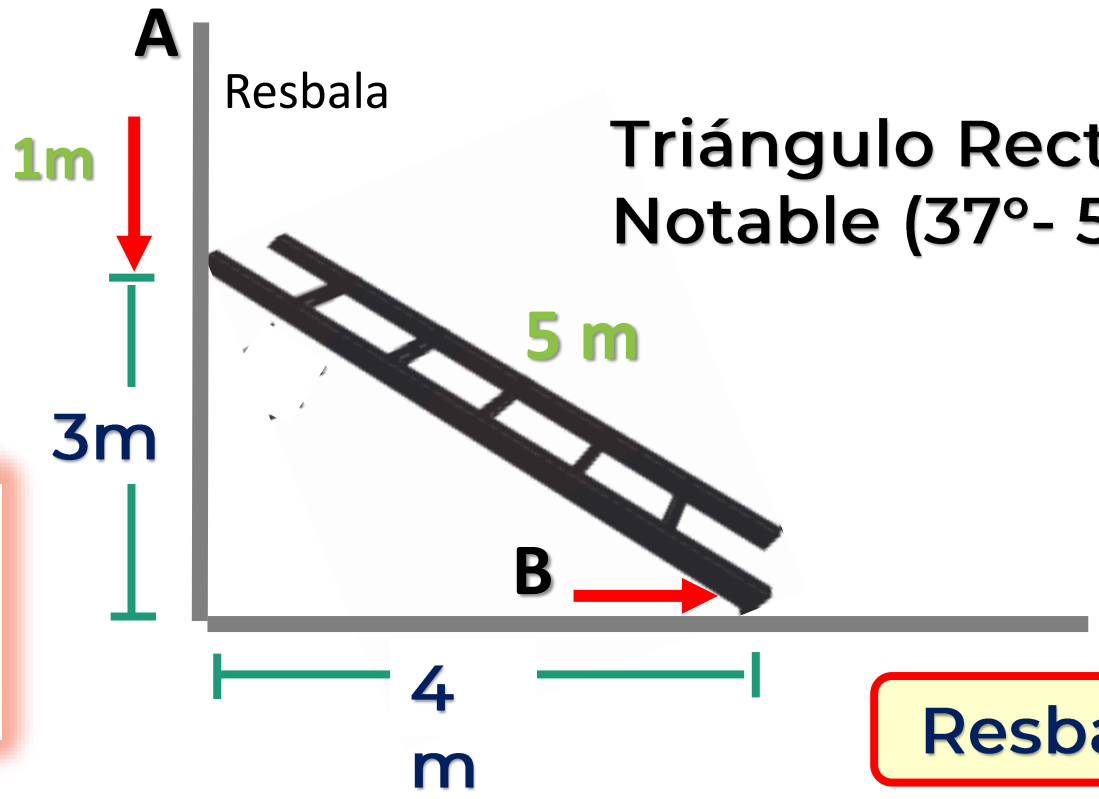
$BE = 3\sqrt{3}m$

8. 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?



Triángulo Rectángulo Notable (37°- 53°)

Resbala 1m