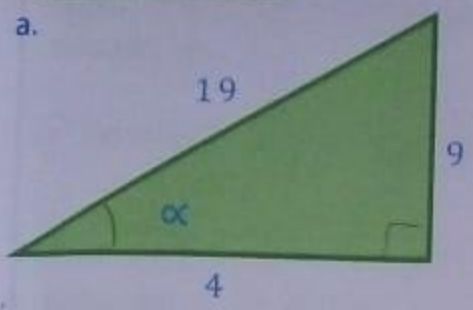
Actividad

1 Hallar las razones trigonométricas.

a.

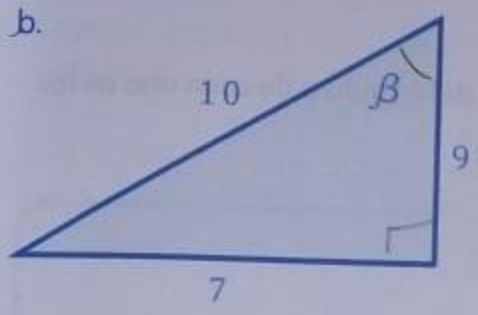


$\text{Sen}\ \alpha = \frac{9}{19}$ 0,47 $\quad \text{Csc}\ \alpha = \frac{19}{9}$ 2,11

$\text{Cos}\ \alpha = \frac{4}{19}$ 0,11 $\quad \text{Sec}\ \alpha = \frac{19}{4}$ 4,15

$\text{Tan}\ \alpha = \frac{9}{4}$ 2,5 $\quad \text{Cot}\ \alpha = \frac{4}{9}$ 0,44

b.



$\text{Sen}\ \beta = \frac{9}{10}$ 0,9 $\quad \text{Csc}\ \beta = \frac{10}{7}$ 1,11

$\text{Cos}\ \beta = \frac{7}{10}$ 0,7 $\quad \text{Sec}\ \beta = \frac{10}{9}$ 1,42

$\text{Tan}\ \beta = \frac{9}{10}$ 1,18 $\quad \text{Cot}\ \beta = \frac{9}{7}$ 0,77

1 Realizar las siguientes operaciones.

(a) Cot 30° + Tan 30°

$\cot(30°) = \sqrt{3}$

$\text{Tan}\ 60° = \frac{\sqrt{3}}{3} = \frac{\sqrt{3}}{3}$

(c) Sen 30° + Cos 30°

$\frac{1}{2}$

$\cos(60°) = \frac{1}{2} = \frac{1}{2} + \frac{\sqrt{3}}{2}$

(e) Cot 60° + Csc 60°

$\cot(60°) \frac{\sqrt{3}}{3}$

$\csc(60°) \frac{\sqrt{3}}{2}$

(b) Sec 30° - Cot 60°

$\sec(30°) = \frac{\sqrt{3}}{2}$

$\cot(60°) = \frac{\sqrt{3}}{3} = \frac{\sqrt{3}}{3}$

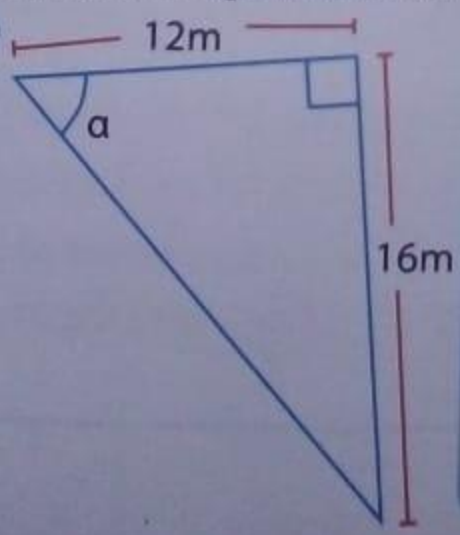
(d) Cos 60° + Tan 45°

$\cos(60°) \frac{1}{2}$

$\text{Tan}(45°) = 1\ \frac{1}{2}$

2 Halla las razones trigonométricas del ángulo α en cada triángulo rectángulo.

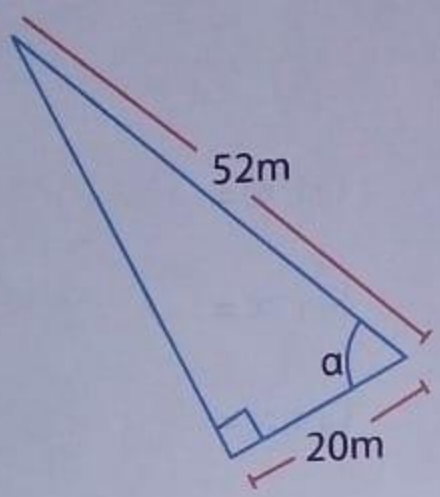
(a.)



$\text{Cos} = \frac{b}{h} = \frac{12}{16} = \frac{3}{4}$

$\text{Sec} = \frac{h}{b} = \frac{16}{12} = \frac{1}{(0)}\ (\frac{4}{3})$

b.

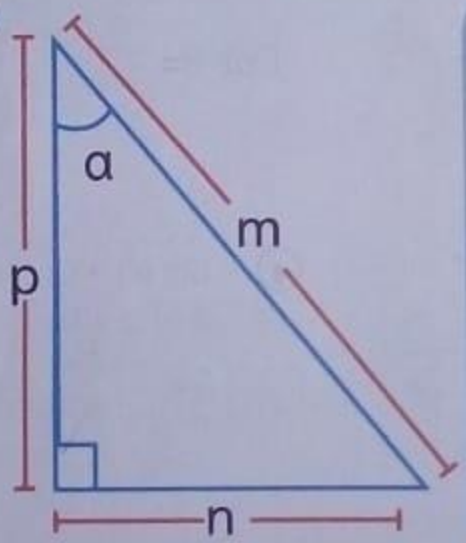


$\cos \frac{b}{h} = \frac{13}{5}$

$\sec = \frac{h}{b} = \frac{5}{13}$

3 Escribe, en función de m, n y p, el seno, el coseno y la tangente del ángulo α de cada uno triángulos rectángulos que se muestran a continuación.

a.

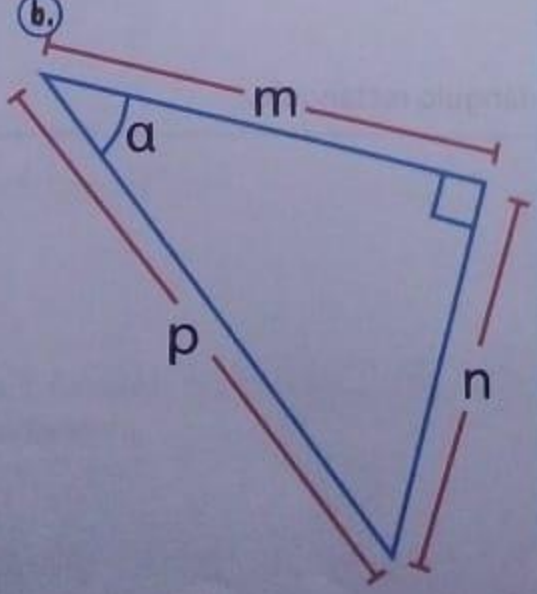


$\cos(a) = p/m$

$\text{sen}(a) = n/m$

$\text{Tan}(a) = n/p$

b.



$\cos(a) = M/p$

$\text{Sen}(a) = n/p$

$\text{Tan}(a) = n/M$