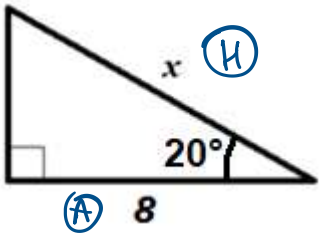
Exercices – Trigonométrie 1 **(arrondir si nécessaire à 0,01 près)**

Exercice 1 :

Calculer la longueur x



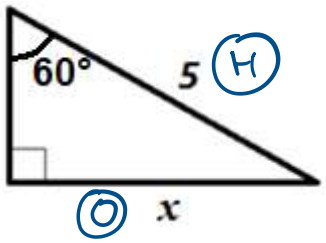
CAH

$\cos 20° = \frac{8}{x}$

$x = \frac{8 \times 1}{\cos 20°} \approx 8,51$

Exercice 2 :

Calculer la longueur x



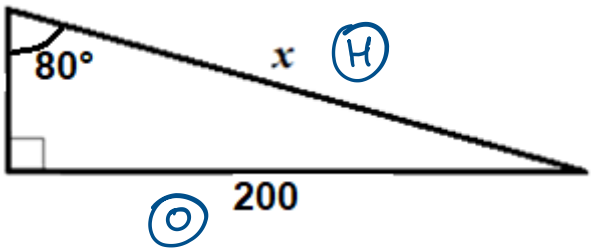
SOH

$\sin 60° = \frac{x}{5}$

$x = 5 \times \sin 60° \approx 4,33$

Exercice 3 :

Calculer la longueur x



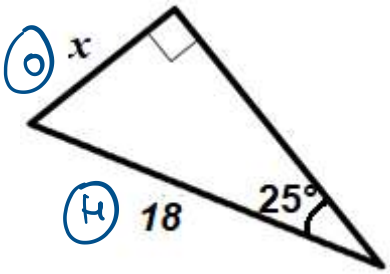
SOH

$\sin 80° = \frac{200}{x}$

$x = \frac{1 \times 200}{\sin 80°} \approx 203,09$

Exercice 4 :

Calculer la longueur x



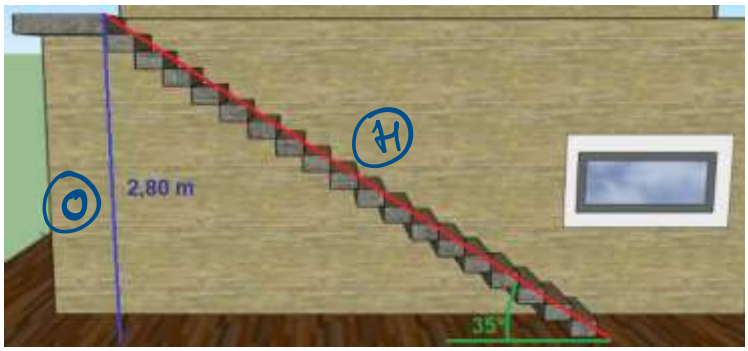
SOH

$\sin 25° = \frac{x}{18}$

$x = 18 \times \sin 25° \approx 7,61$

exercice 5 :

Calculer la longueur en rouge de cet escalier



SOH

$\sin 35° = \frac{2,80}{x}$

$x = \frac{1 \times 2,80}{\sin 35°} \simeq 4,88$ m

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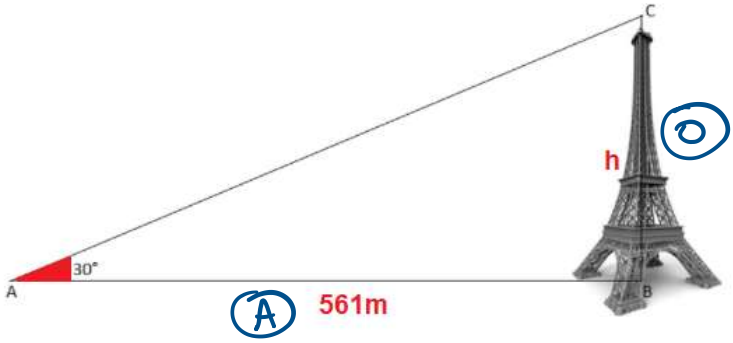
exercice 6 :

Calculer la hauteur de la tour Eiffel



TOA

$\tan 30° = \frac{h}{561}$

$h = 561 \times \tan 30° \simeq 324$ m

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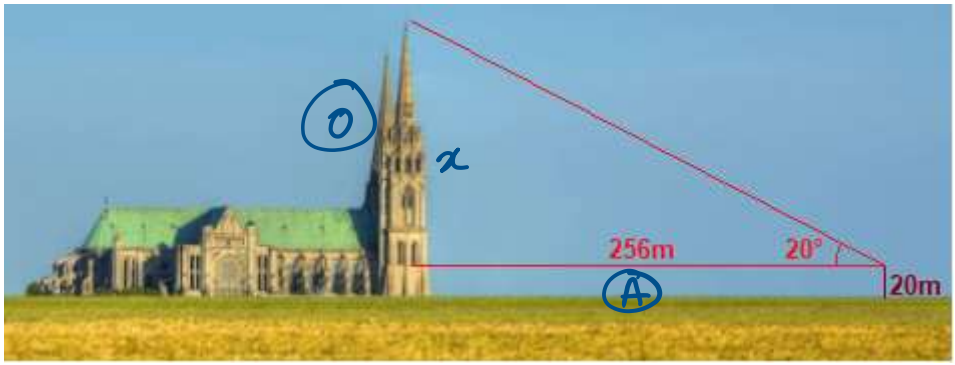
exercice 7 :

Calculer la hauteur de la cathédrale de Chartres



TOA

$\tan 20 = \frac{x}{256}$

$x = 256 \times \tan 20° \simeq 93$ m

donc $h = 93 + 20 = 113$ m