



$$\tan(45^\circ) = \frac{h}{AC} \quad \text{et} \quad \tan(49^\circ) = \frac{h}{BC}$$

o- sait que  $AC = 40 + BC$

$$\text{Donc} \quad \tan(45^\circ) = \frac{h}{40 + BC} \quad \text{et} \quad \tan(49^\circ) = \frac{h}{BC}$$

$$\text{Donc} \quad h = (40 + BC) \tan(45^\circ) \quad \text{et} \quad h = \tan(49^\circ) \times BC$$

$$\text{Donc} \quad (40 + BC) \tan(45^\circ) = BC \times \tan(49^\circ)$$

$$\Leftrightarrow 40 \times \tan(45^\circ) + BC \tan(45^\circ) = BC \times \tan(49^\circ)$$

$$\Leftrightarrow 40 + BC = BC \times \tan(49^\circ)$$

$$\Leftrightarrow BC = \frac{40}{\tan(49^\circ) - 1} \approx 266,01 \text{ m}$$

$$\text{Donc} \quad h = BC \times \tan(49^\circ) = \frac{40}{\tan(49^\circ) - 1} \times \tan(49^\circ)$$

$$\approx \underline{\underline{306,01 \text{ m}}}$$