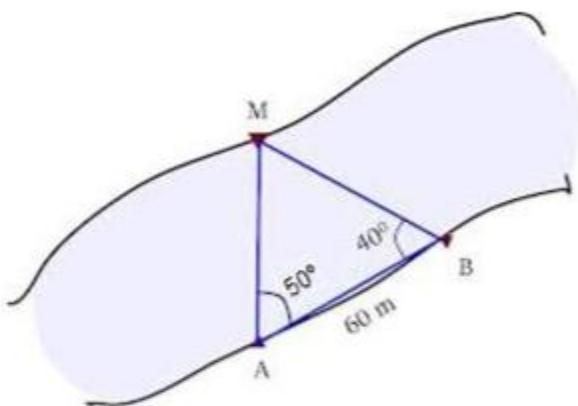


## PROBLEMAS DE TRIGONOMETRÍA (II)

Calcula la anchura del río en un cierto punto sabiendo que los ángulos de observación son de  $40^\circ$  y  $50^\circ$



$$\left. \begin{array}{l} \tan 50 = \frac{h}{x} \\ \tan 40 = \frac{h}{60-x} \end{array} \right\} h = x \tan 50 = 29.54 \text{ m}$$

$$\tan 40 = \frac{x \tan 50}{60-x} \rightarrow (60-x) \tan 40 = x \tan 50$$

$$60 \tan 40 - x \tan 40 = x \tan 50$$

$$60 \tan 40 = x \tan 40 + x \tan 50$$

$$60 \tan 40 = x(\tan 40 + \tan 50)$$

$$x = \frac{60 \tan 40}{\tan 40 + \tan 50} = 24.79 \text{ m}$$

