(13)

Igualem les dues expressions d'h:

$$2x \operatorname{tg}\alpha = x \operatorname{tg} 35^\circ \iff 2\operatorname{tg}\alpha = \operatorname{tg}35^\circ \iff$$
$$x \neq 0$$

$$\iff \boxed{\operatorname{tg}\alpha = \frac{\operatorname{tg}35^\circ}{2}} \quad (*)$$

$$\operatorname{tg}\alpha = \frac{0'7}{2} = 0'35$$

$$\alpha = \operatorname{arctg}(0'35) = 19{,}30^\circ$$

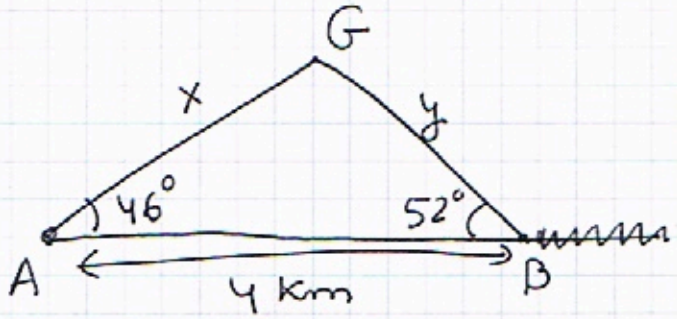
Si la distància és el triple:

Canviem en (*) el 2 pel un 3.

$$\operatorname{tg}\alpha = \frac{\operatorname{tg}35^\circ}{3} = \frac{0'7}{3} = 0'23$$

$$\alpha = \operatorname{arctg}(0'23) = 13{,}14^\circ$$

(13)



$x = ?$
$y = ?$

$\hat{A} = 46^\circ$, $\hat{B} = 52^\circ$

$\hat{A} + \hat{B} + \hat{G} = 180^\circ \iff 46 + 52 + G = 180^\circ \iff G = 82^\circ$

Tma del sinus:

$$\frac{4}{\sin 82^\circ} = \frac{x}{\sin 52^\circ} \iff x = \frac{4 \sin 52^\circ}{\sin 82^\circ} = 3{,}18 \text{ km}$$

$$\frac{4}{\sin 82^\circ} = \frac{y}{\sin 46^\circ} \iff y = \frac{4 \cdot \sin 46^\circ}{\sin 82^\circ} = 2{,}91 \text{ km}$$

L'observador A es troba a 3,18 km del globus i l'observador B a 2,91 km