

$$\sin \theta = \frac{o}{h}$$

$$\sin \theta = \frac{8}{12.3}$$

$$\sin \theta = 0.6504$$

$$\theta = \underline{\underline{41^\circ}}$$

2.

$$\sin \theta = \frac{o}{h}$$

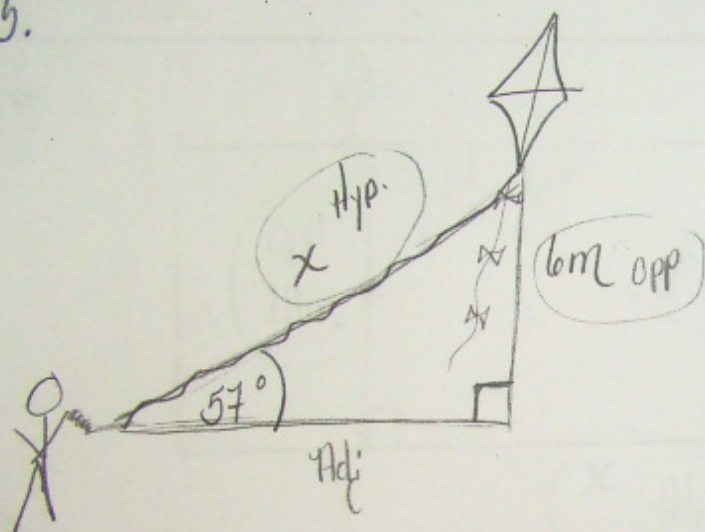
$$\sin 24^\circ = \frac{2.5}{x}$$

$$0.4067 = \frac{2.5 \cdot x}{x}$$

$$\frac{0.4067x}{0.4067} = \frac{2.5}{0.4067}$$

$$x = \underline{\underline{6.1m}}$$

3.



$$\sin \theta = \frac{o}{h}$$

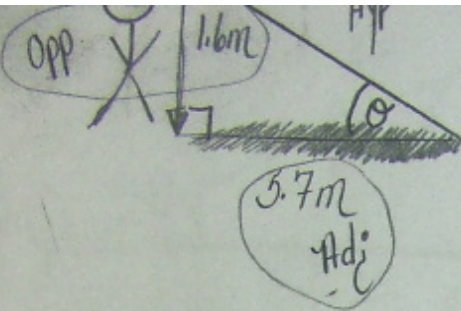
$$\sin 57^\circ = \frac{6}{x}$$

$$0.8387 = \frac{6 \cdot x}{x}$$

$$\frac{0.8387x}{0.8387} = \frac{6}{0.8387}$$

$$0.8387x = 6$$

$$x = 7.2m$$



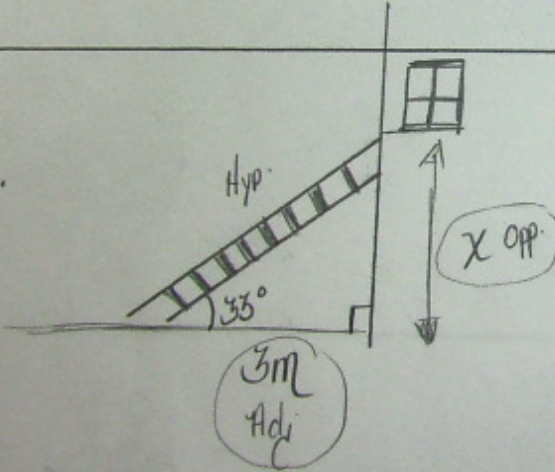
Opp 1.6m
Adj 5.7m
 θ

$$\tan \theta = \frac{1.6}{5.7}$$

$$\tan \theta = 0.2807$$

$$\theta = \underline{\underline{16^\circ}}$$

5.



Hyp.
33°
3m Adj
x opp

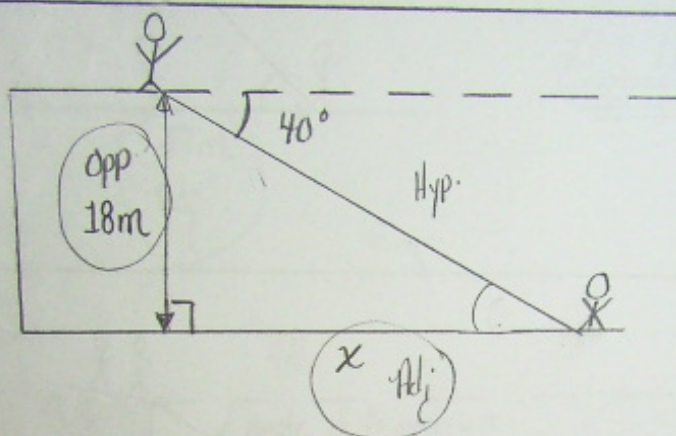
$$\tan \theta = \frac{0}{2}$$

$$\tan 33^\circ = \frac{x}{3}$$

$$0.6494 = \frac{x}{3}$$

$$x = \underline{\underline{1.9m}}$$

6.



$$\tan \theta = \frac{O}{A}$$

$$\tan \theta = \frac{18}{x}$$

$$\tan 40^\circ = \frac{18}{x}$$

$$0.8391 = \frac{18}{x}$$

$$0.8391x = 18$$

$$\frac{0.8391x}{0.8391} = \frac{18}{0.8391}$$

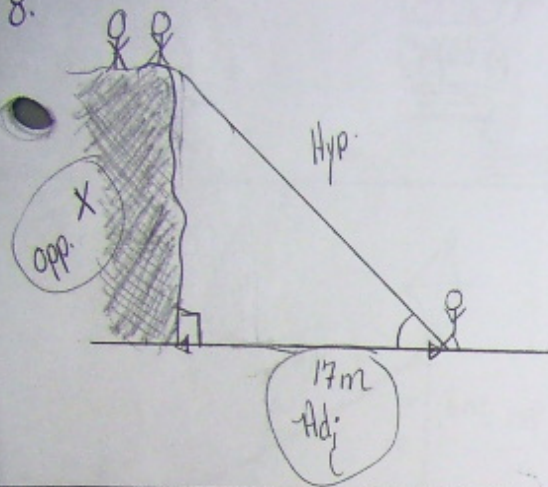
$$x = \underline{\underline{21.5 \text{ m}}}$$

$\tan \theta = \frac{O}{A}$
 $\tan 60^\circ = \frac{1027}{x}$
 $1.7321 = \frac{1027}{x}$
 $1.7321x = 1027$
 $x = \frac{1027}{1.7321}$
 $x = \underline{\underline{592.9m}}$

8.

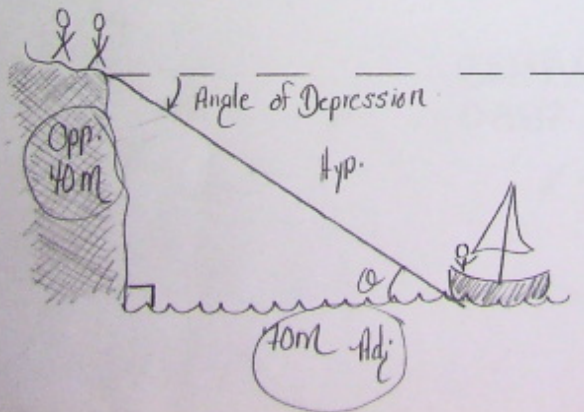
$\tan 48^\circ = \frac{x}{17}$
 $1.1106 = \frac{x}{17}$
 $x = \underline{\underline{18.9m}}$

8.



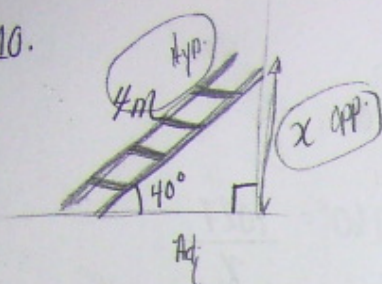
$$\begin{aligned} \tan 48^\circ &= \frac{x}{17} \\ 1.1106 &= \frac{x}{17} \\ x &= \underline{\underline{18.9m}} \end{aligned}$$

9.



$$\begin{aligned} \tan \theta &= \frac{40}{70} \\ \tan \theta &= 0.5714 \\ \theta &= \underline{\underline{30^\circ}} \end{aligned}$$

10.



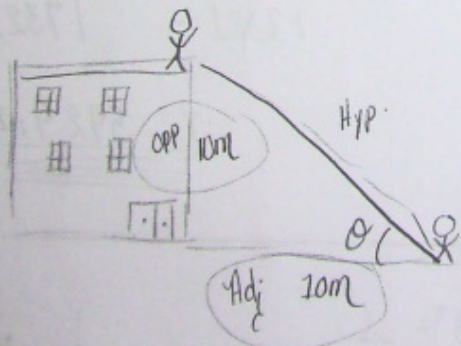
$$\sin \theta = \frac{o}{h}$$

$$\sin 40^\circ = \frac{x}{4}$$

$$0.6428 = \frac{x}{4}$$

$$\underline{\underline{x = 2.6 \text{ m}}}$$

11.



$$\tan \theta = \frac{o}{a}$$

$$\tan \theta = \frac{10 \text{ m}}{10 \text{ m}}$$

$$\tan \theta = 1$$

$$\underline{\underline{\theta = 45^\circ}}$$