

#1

1150m

17°

1st

1150 opp

x Adj

Hyp

2nd

1150 opp

Adj

17°

x Hyp

$$\tan 17^\circ = \frac{1150}{x}$$

$$0.3057x = 1150$$

$$\frac{0.3057}{0.3057} \quad \frac{1150}{0.3057}$$

$$x = 3761.5 \text{ m}$$

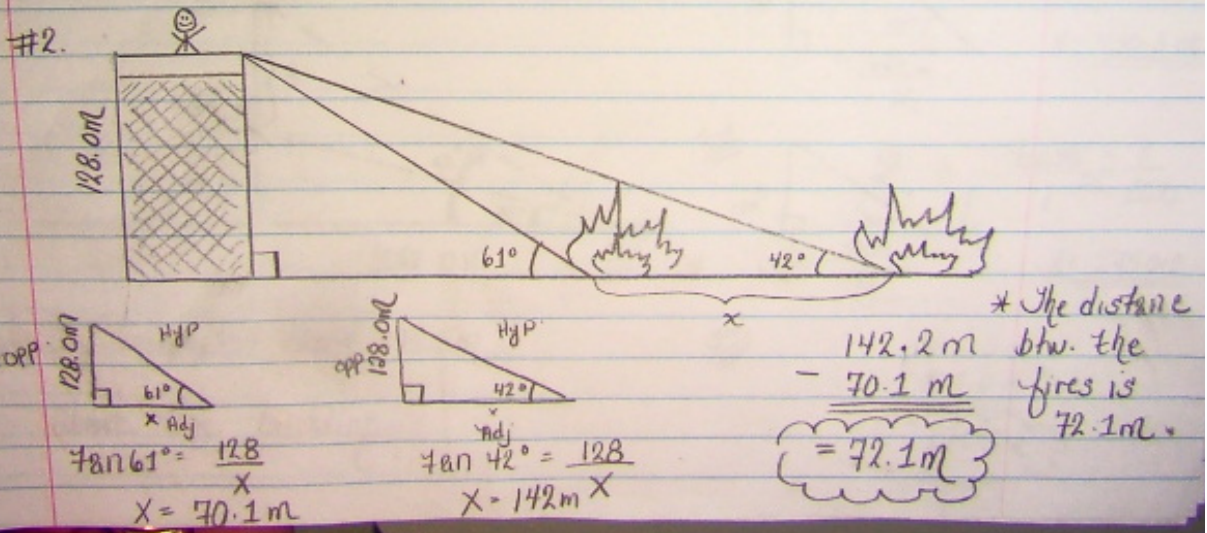
$$\sin 17^\circ = \frac{1150}{x}$$

$$0.2924x = 1150$$

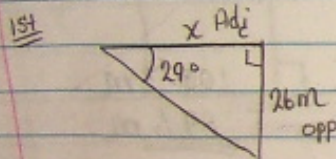
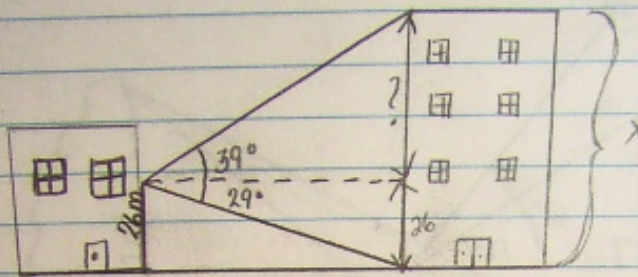
$$\frac{0.2924}{0.2924} \quad \frac{1150}{0.2924}$$

$$x = 3933.3 \text{ m}$$

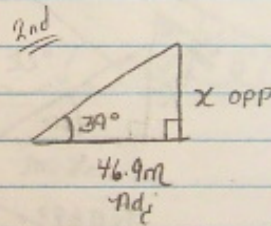
- > The horizontal distance is 3761.5m.
- => The distance btw. the plane and the tower 3933.3m.



#3.



$$\begin{aligned} \tan 29^\circ &= \frac{26}{x} \\ 0.5543x &= 26 \\ 0.5543 & \quad 0.5543 \\ x &= \underline{\underline{46.9m}} \end{aligned}$$



$$\begin{aligned} \tan 39^\circ &= \frac{x}{46.9} \\ 1 & \quad \times \quad 46.9 \\ x &= \underline{\underline{38.0m}} \end{aligned}$$

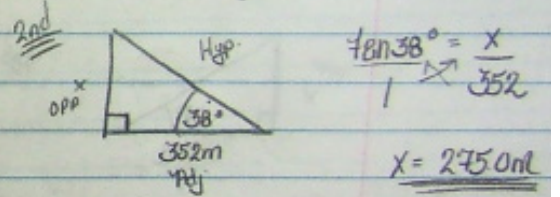
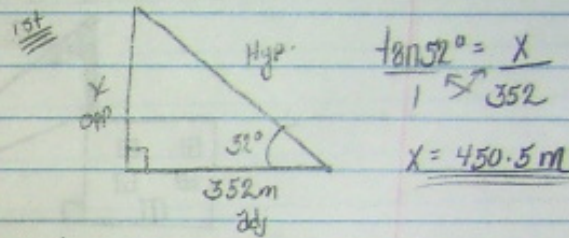
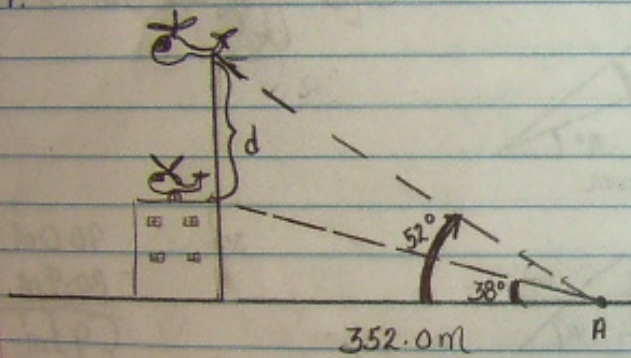
3rd

$$\begin{array}{r} 38.0m \\ 26m \\ \hline 64m \end{array}$$

* The building is 64m tall

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#4.



* The helicopter rised 175.5m
Above the building.

