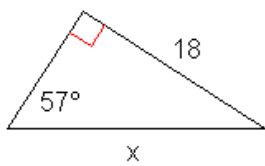
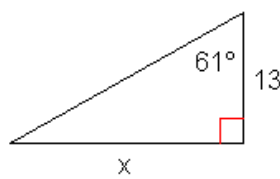


Find the missing side. Round to the nearest tenth.

1)

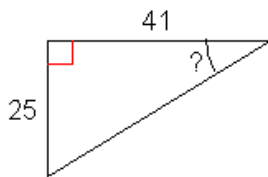


2)

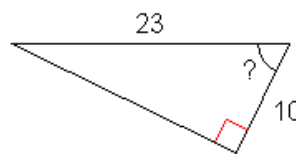


Find the measure of the indicated angle to the nearest degree.

3)



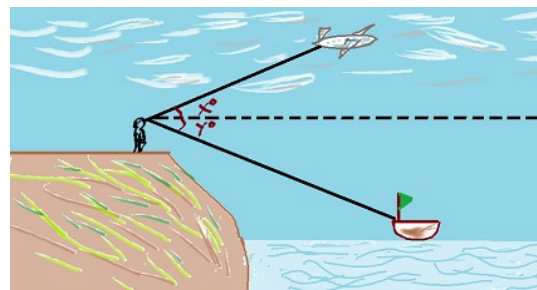
4)

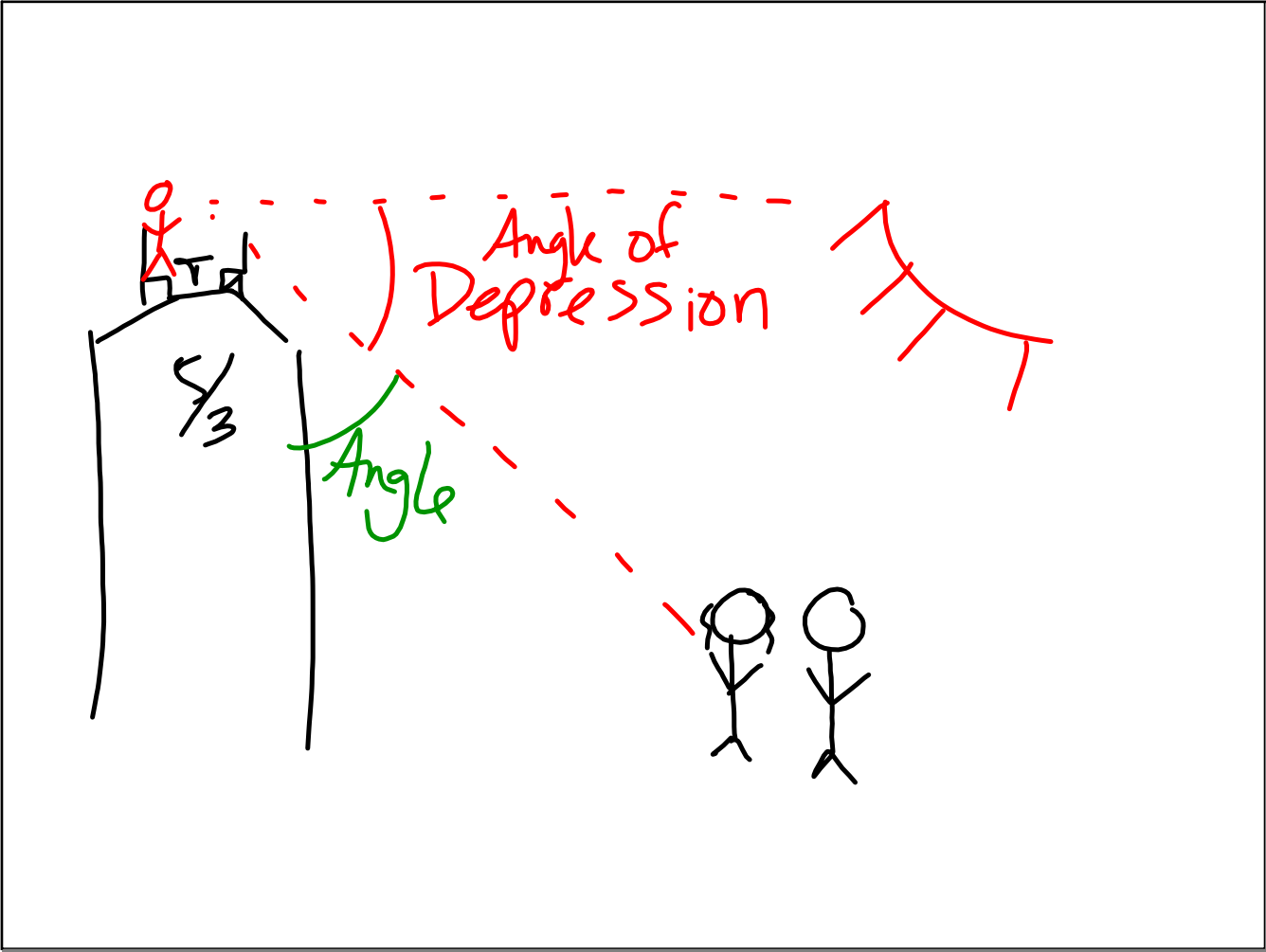


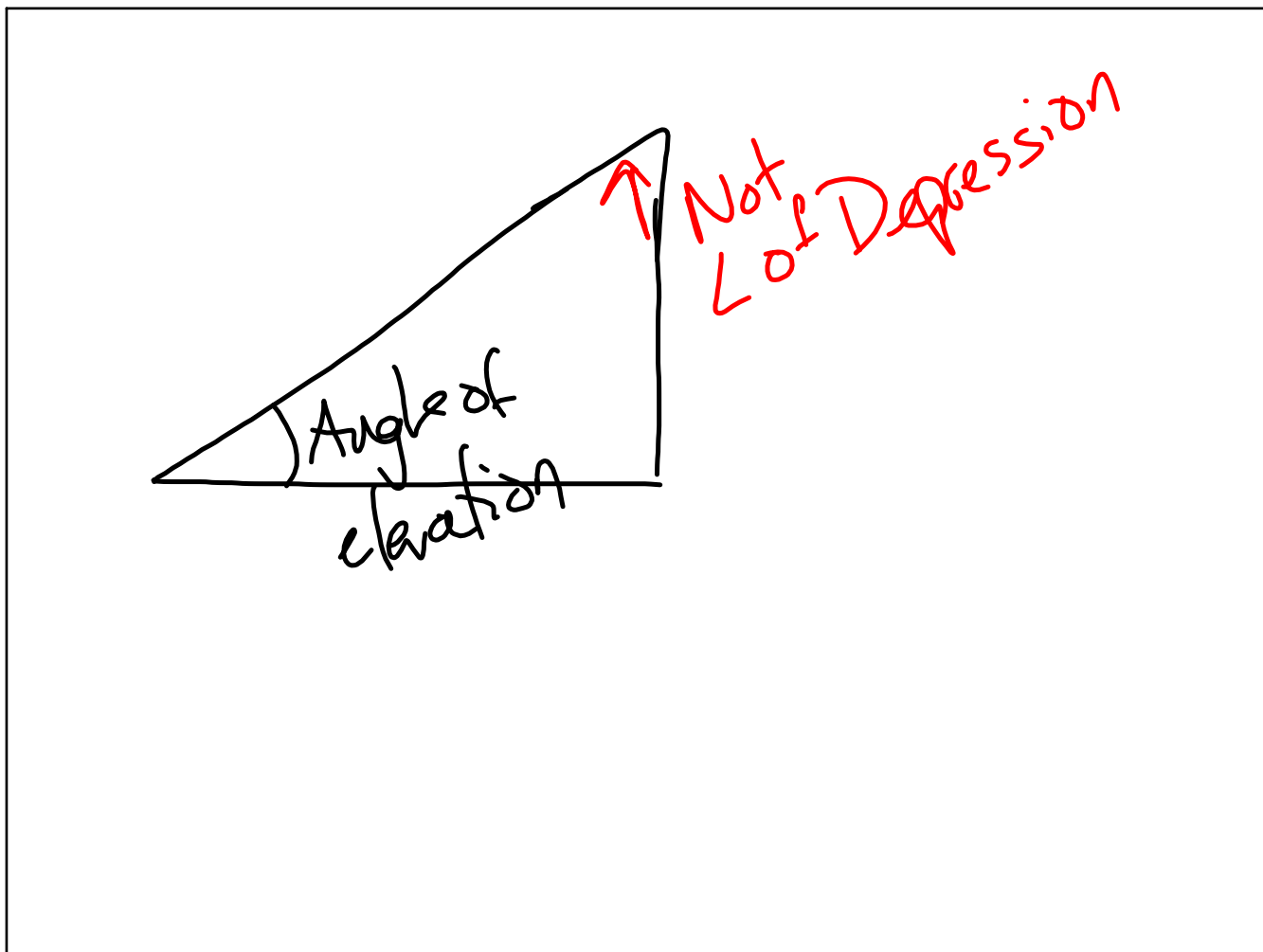
Which angle in the diagram is an...

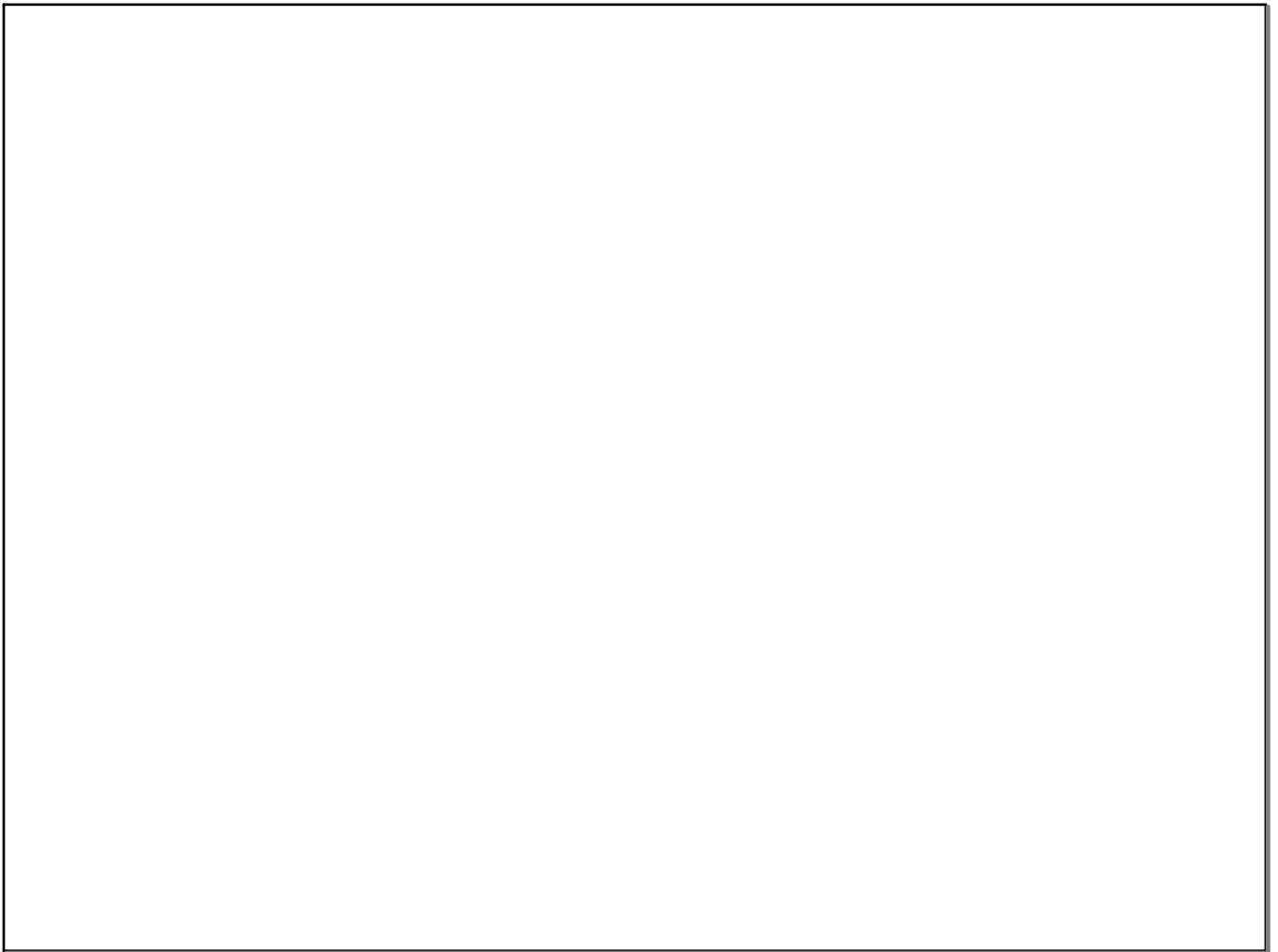
5) angle of elevation

6) angle of depression









Example 1

Liola drives 180 m up a hill that has a slope of 6° . What horizontal distance, to the nearest hundredth of a meter, has she covered?

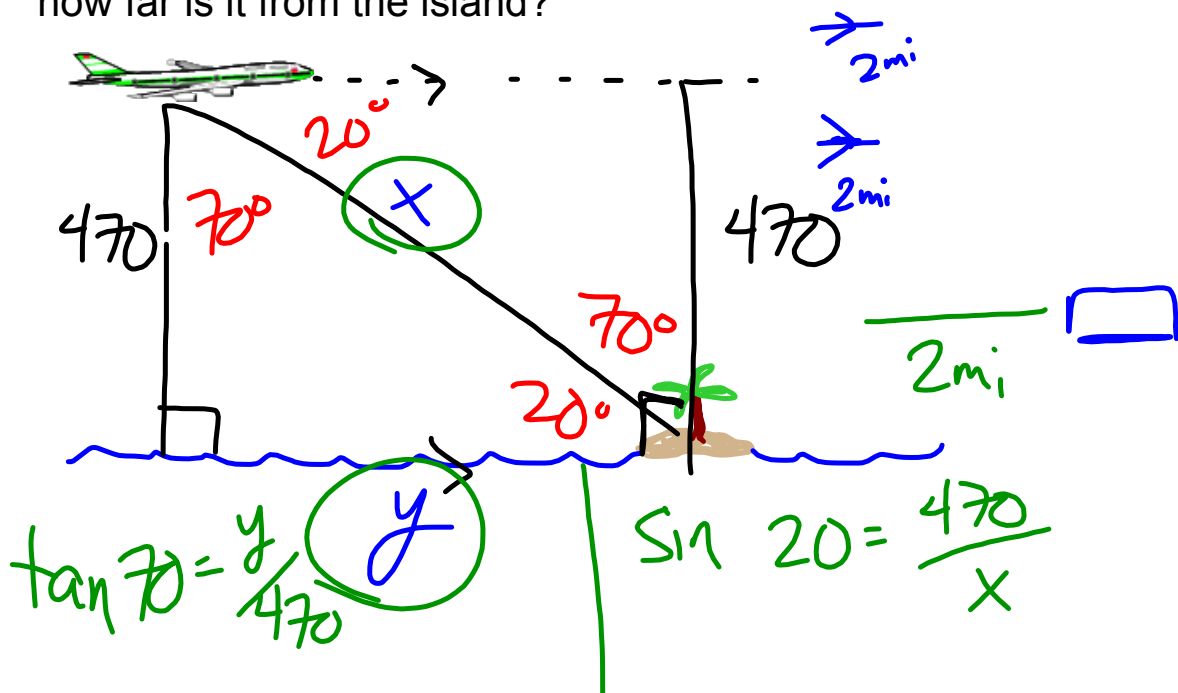


$$180 \cos 6 = \frac{x}{180} \cdot 180 \quad x \text{ adj}$$

$$\underline{179.01} = x$$

Example 2

A passenger on an airplane over the Pacific sights a small island at a 20° angle of depression. If the plane is 470 m above water, how far is it from the island?



Example 3

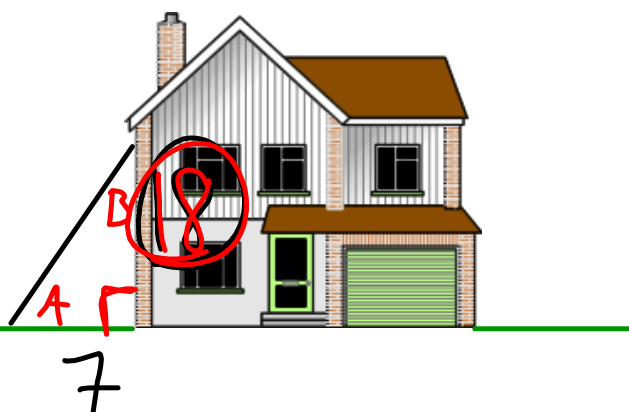
A ladder leans against a house. The top of the ladder reaches a point on the house which is 18 feet above the ground. The foot of the ladder is 7 feet from the house. Find the measure of the angle which the ladder makes with the level ground.

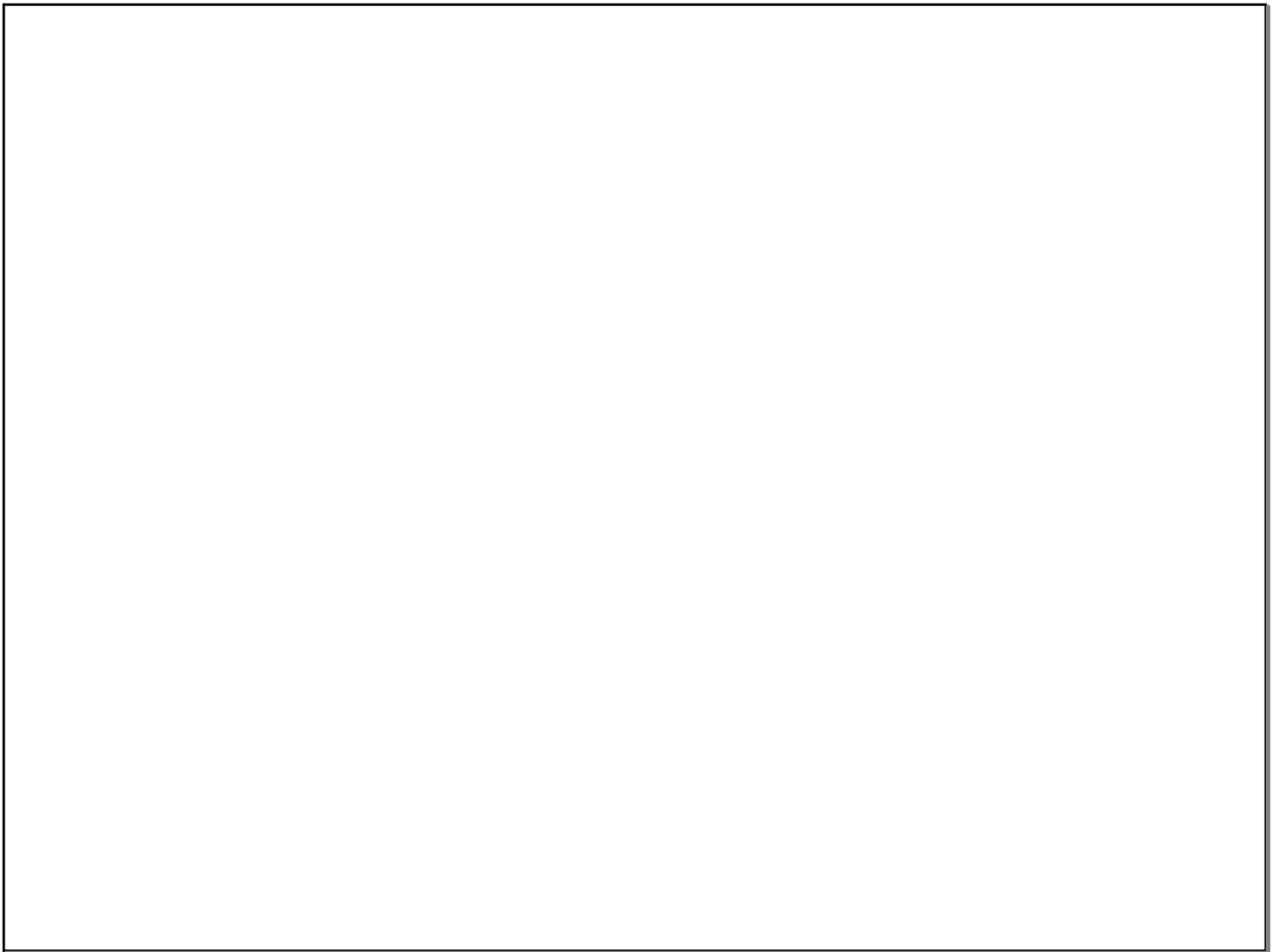
(A)

$$\tan A = \frac{18}{7}$$

$$A = \tan^{-1}\left(\frac{18}{7}\right)$$

$$A = 68.75^\circ$$





Classwork

Complete the Geo Joke Worksheet,
"What's green and loud?"

Don't forget to DRAW DIAGRAMS!

Homework

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Exit Slip

When a 20-ft ladder is leaned against a wall, it makes a 72° angle with the ground. How high up on the wall does the ladder reach?

