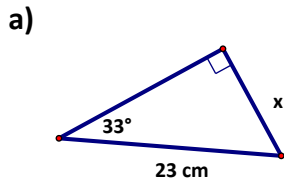


**PROBLEM SET 8-9 LAB**

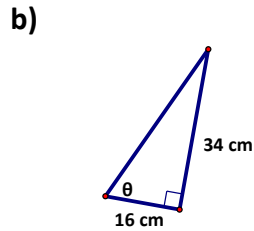
Name: \_\_\_\_\_ Section: \_\_\_\_\_

$$\sin^{-1}\left(\frac{\text{Opp}}{\text{Hyp}}\right) = \theta ; \cos^{-1}\left(\frac{\text{Adj}}{\text{Hyp}}\right) = \theta ; \tan^{-1}\left(\frac{\text{Opp}}{\text{Adj}}\right) = \theta$$

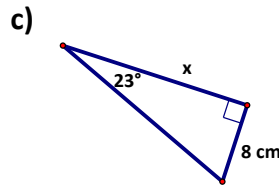
1. Solve for the missing information indicated by the variable. Round all final answers to 1 decimal place.



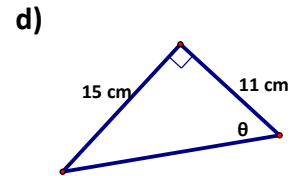
$x \approx$  \_\_\_\_\_



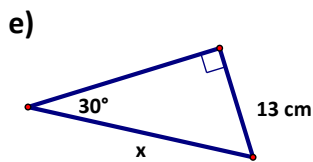
$\theta =$  \_\_\_\_\_



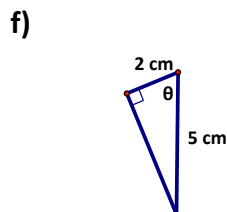
$x \approx$  \_\_\_\_\_



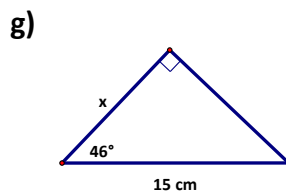
$\theta =$  \_\_\_\_\_



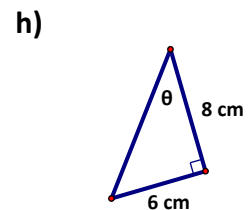
$x \approx$  \_\_\_\_\_



$\theta =$  \_\_\_\_\_

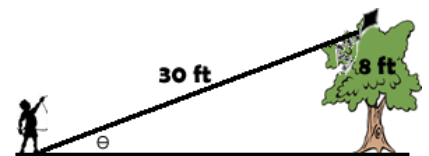


$x \approx$  \_\_\_\_\_

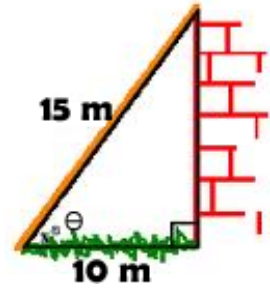


$\theta =$  \_\_\_\_\_

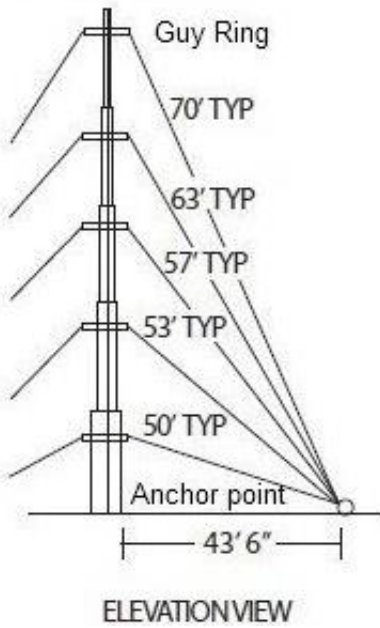
2. You are flying a kite and have let out 30 ft of string but it got caught in a 8 ft tree. What is the angle of elevation to the location of the kite? (Round to the nearest hundredth)



3. A 15 m pole is leaning against a wall. The foot of the pole is 10 m from the wall. Find the angle, to the nearest hundredth, that the pole makes with the ground.



1. Given the drawing of the guy lines for a satellite tower, determine the angle made between the ground and the



A) 50 foot guy wire, to the nearest hundredth of a degree

B) 70 foot guy wire, to the nearest hundredth of a degree

C) What did you observe?