

Tower Trig

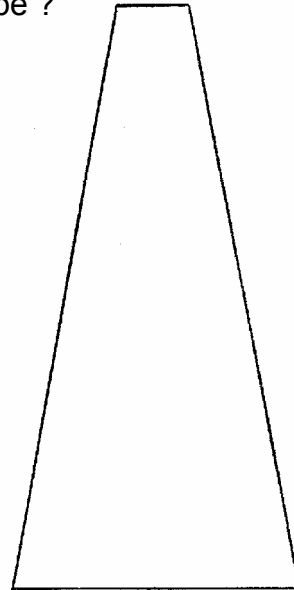
For a tower that is at least 400 mm tall,
how long should the edge of the tower be ?

$$\Theta = \tan^{-1} \frac{opp}{adj}$$

$$\Theta = \tan^{-1} \frac{400}{75} = 79.4$$

$$\sin \Theta = \frac{opp}{hyp}$$

$$hyp = \frac{opp}{\sin \Theta} = \frac{400}{.983} = 407mm$$



Ans: The edge of the tower should be at least 407mm long.

