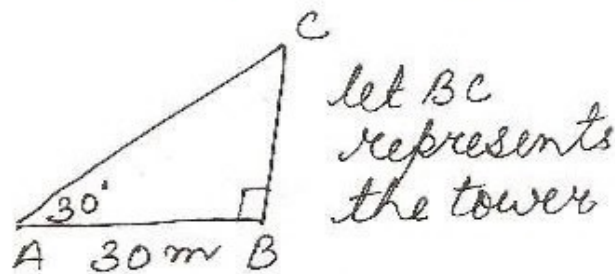


④

In rt  $\Delta ABC$ 

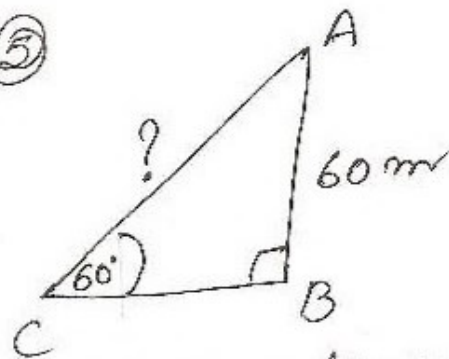
$$\tan 30^\circ = \frac{BC}{AB}$$

$$\& \frac{1}{\sqrt{3}} = \frac{BC}{30}$$

$$\Rightarrow BC = \frac{30}{\sqrt{3}} \\ = 10\sqrt{3}$$

$\therefore$  Height of tower  $= 10\sqrt{3} \text{ m}$

⑤



let A represent ..  
position of kite,  
AC the string

In rt  $\Delta ABC$ 

$$\sin 60^\circ = \frac{AB}{AC}$$

$$\frac{\sqrt{3}}{2} = \frac{60}{AC}$$

$$\Rightarrow AC = \frac{120}{\sqrt{3}}$$

$$\Rightarrow AC = 40\sqrt{3} \\ \text{length of string} = 40\sqrt{3} \text{ m}$$