

19/11/2020
THURSDAY

MATHEMATICS

STD-8
class-62

Assignment

1) When the sun is at an elevation of 40° , the length of the shadow of a tree is 18 m. What is the height of the tree? ($\tan 40 = 0.84$).

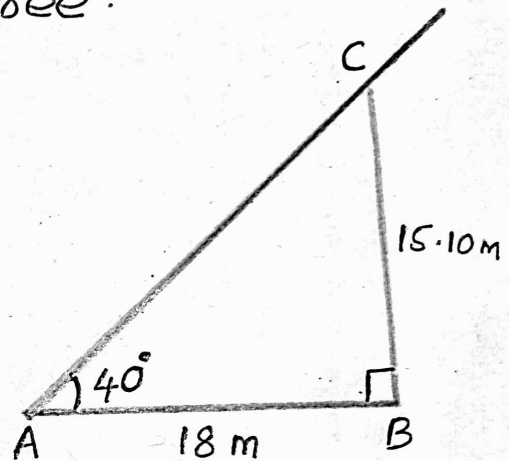
Ans) Here AB is the shadow of the tree.

In $\triangle ABC$,

$$\tan 40^\circ = \frac{BC}{AB}$$

$$BC = AB \times \tan 40^\circ$$
$$= 18 \times 0.8391$$

$$\therefore BC = \underline{\underline{15.10}}$$



$$\therefore \text{Height of the tree} = \underline{\underline{15.10 \text{ m}}}$$