**The Norfolk Pine Tree.**

 F



🚺

***y***

 A B C D E ***x***

The large Norfolk pine tree is 30 metres from the side of the hemispherical dome-house. AB = 30 m

The diameter of the dome-house is 16 metres.

The tree has grown so much in the last year that it is now just visible from the point E which is on the other side of the dome-house.

The distance DE is **not known** but the gradient of the “line of sight” from E to the top of the tree F, is **– ½** .

Calculate the height of the Norfolk pine tree.