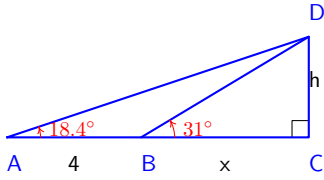


## Solving A Triangle



Wanted: Length of  $CD$

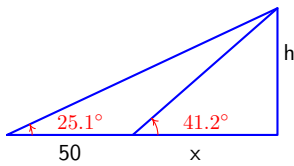
Method: Set up two equations for  $CD$ , using the triangles  $ACD$  and  $BCD$ .

Notes

## Calculating Heights using Angles of Elevation

Paul measures the height of a tree from two locations. First, he finds out that the angle of elevation from where he is standing is  $41.2^\circ$ . Then he moves back  $50\text{ft}$  from the tree. The new angle of elevation is  $25.1^\circ$ .

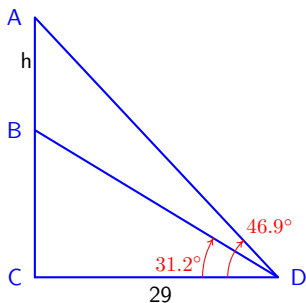
How tall is the tree?



Notes

## Calculating Heights using Angles of Elevation

Jennie, an electrical engineer, needs to know how tall the antenna sitting on the top of the building is. Standing  $29\text{ ft}$  away, the angle of elevation to the top of the antenna is  $46.9^\circ$ , and to the bottom of the antenna is  $31.2^\circ$ .



Notes