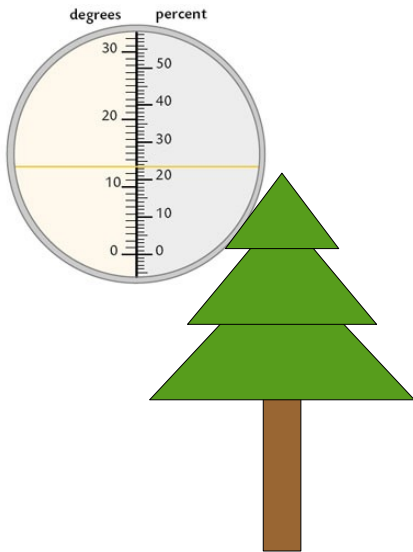


How tall is this tree?

Using a clinometer to measure tree height



1) Find a place to stand where you can see the top of the tree. The distance away from the tree should be at least equal to the height of the tree.

2) Measure the distance to the tree and the height that the clinometer will be from the ground.

3) Look through the clinometer with one eye and at the tree with the other eye (this takes a bit of getting used to). Line up the crosshair in the clinometer with the top of the tree.

4) Read the number on the percent scale. This gives you the tree's height as a percentage of the distance from the tree. Eg. If it reads 50% the height of the tree is half the distance you are from the tree.

5) Calculate the height of the tree using the equation:
Tree height = clinometer reading/100 x distance to tree + distance of clinometer from the ground

Example:

Distance to tree = 36m
Percent scale reads 75
Height from the ground = 1.8m

Tree height = $75/100 \times 36 + 1.8 = 28.8\text{m}$

