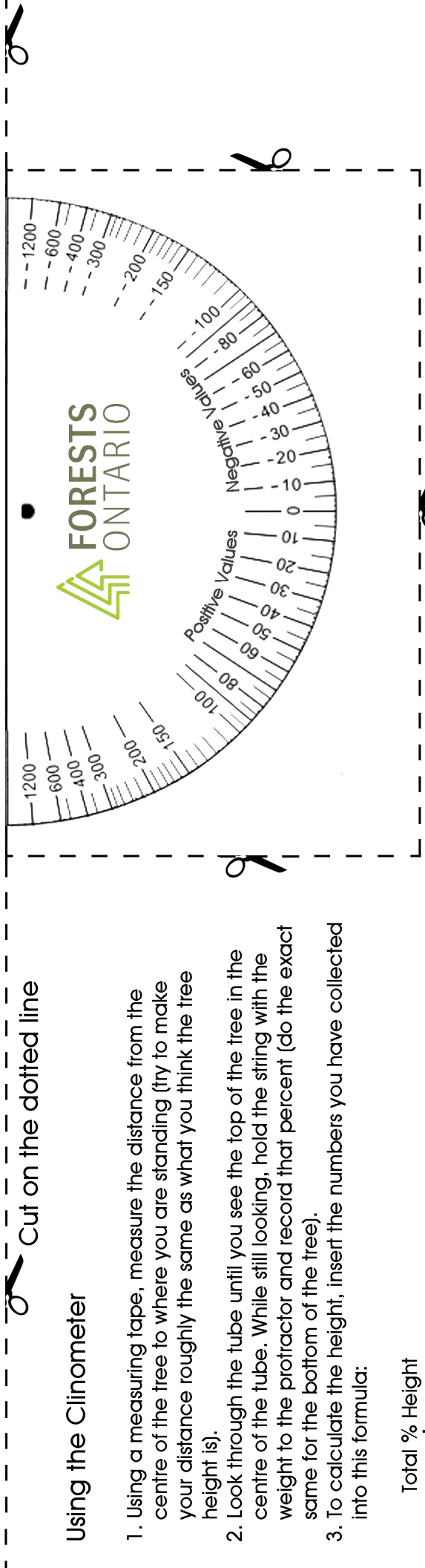


Roll & tape at both ends



Roll & tape at both ends



Cut on the dotted line

Using the Clinometer

1. Using a measuring tape, measure the distance from the centre of the tree to where you are standing (try to make your distance roughly the same as what you think the tree height is).
2. Look through the tube until you see the top of the tree in the centre of the tube. While still looking, hold the string with the weight to the protractor and record that percent (do the exact same for the bottom of the tree).
3. To calculate the height, insert the numbers you have collected into this formula:

Total % Height

$$\left(\% \text{ to Top} - \% \text{ to Bottom} \right) \times \text{Distance from Tree} = \text{Tree Height}$$

Hint: If the '% to Bottom' value is negative, then the 'Total % Height' value will go up. If the '% to Bottom' value is positive, then the 'Total % Height' will go down.

Instructions

1. Cut out the clinometer along the dotted lines.
2. Roll a tube in the direction of the arrows until it is even with the edge of the protractor, and tape both ends of the tube.
3. Make a hole on the dot in the protractor.
4. Pull a string through the whole and tie it to a small weight (ex. a metal washer, or some other weight with a hole in it).