1: Determine your distance from the tree

Step 1: Walk straight back from the bottom of the tree you choose until you can see the top of it clearly.

Step 2: Mark your location with a clipboard, water bottle, or other object that will not move.

Step 3: Use the arborist tape measure to measure the distance from the bottom of the tree to the place that you marked.

Step 4: Write down this distance in the blank next to (b). Make sure to record your answer in meters, not inches or feet.

1: Determine your distance from the tree

2. Determine the angle from your eye to the top of the tree

Step 1: From your marked location, leave both eyes open and look through the clinometer.

Step 2: Line up the top of the tree with the line on the clinometer.

Step 3: Record the number shown on the clinometer in the blank next to (A). Your answer will automatically be in degrees.

2. Determine the angle from your eye to the top of the tree

3. Determine the distance from the ground to your eyes

Step 1: While standing in place, hold one end of arborist tape measure by your eye.

Step 2: Put the other end of the arborist tape measure on the ground. Observe the distance.

Step 3: Record the measurement in the blank next to (z). Make sure to record your answer in meters, not inches or feet.

3. Determine the distance from the ground to your eyes

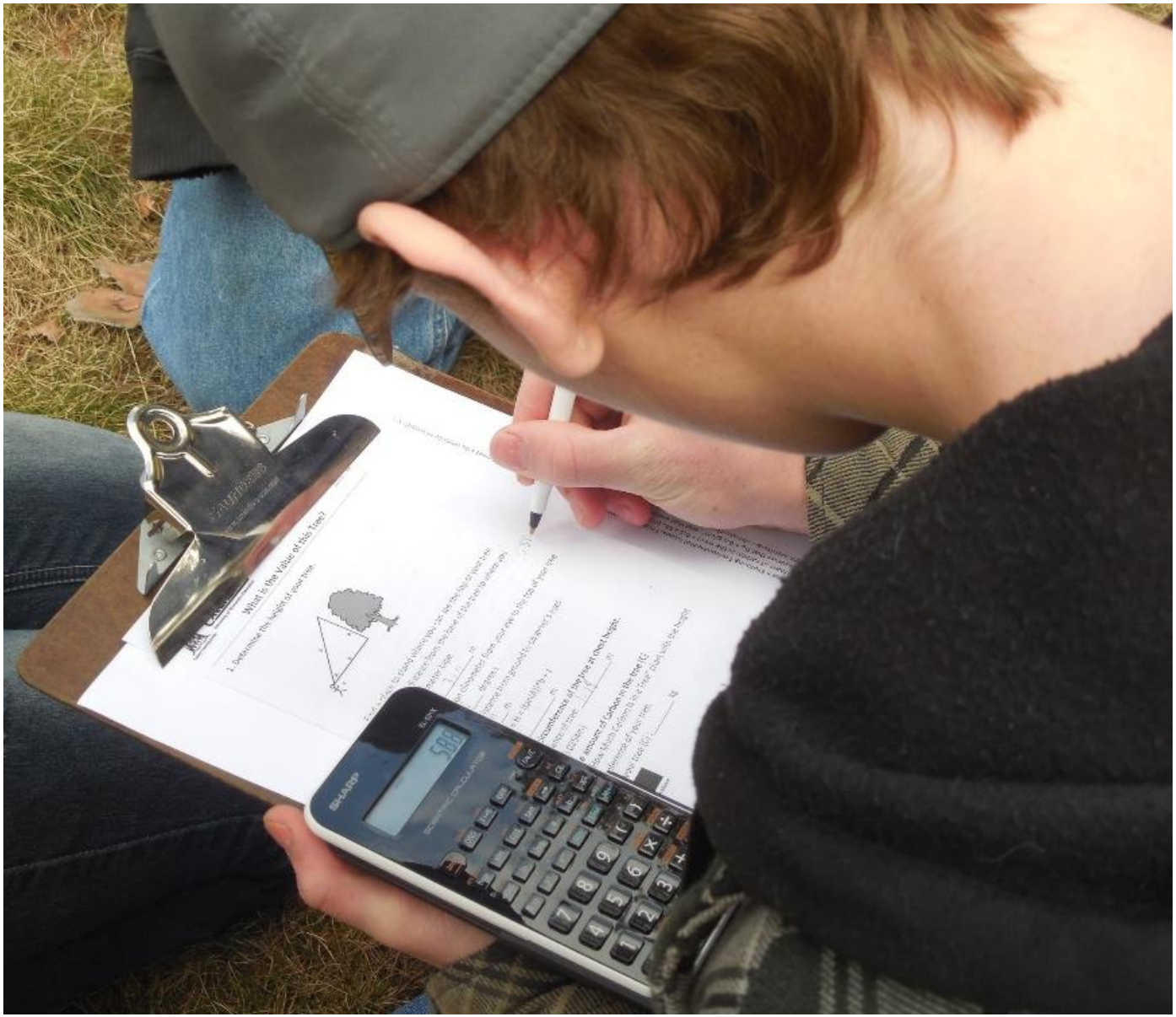
4. Calculate the height of the tree

Step 1: Using your distance from the tree (b), the angle from your eye to the top of the tree (A), and the distance from your eyes to the ground (z), use a calculator and follow the equation on your worksheet to determine the height of the tree. Be mindful of the order of operations in your math!

$H = (\tan(A))*b + z$

Step 2: Record your answer in the blank next to H =. Your answer will be in meters

4. Calculate the height of the tree



5. Determine the circumference of your tree

Step 1: Using either the DBH tape or the arborist tape measure, wrap the measuring tape completely around the tree.

Step 2: Measure the entire circumference of the tree.

Step 3: Record your answer in the blank next to circumference of the tree. Make sure your answer is in meters, not inches or feet.

5. Determine the circumference of your tree