

How to Measure Grade with a Clinometer



The following steps are used to measure grade with a clinometer.

Step 1

Person 2 records the eye level of Person 1 by placing the graduated survey staff (perpendicular) in front of Person 1 and determines their eye height on the staff.

Step 2

Person 2 moves up or down to the other side of the trail section being measured and places some marking tape at the height of Person 1's eyes.

Step 3

Person 1 sights through the clinometer to their eye height on the survey staff and reads off the angle of inclination as a percentage (%) and records it.

Notes:

It is important that both eyes are kept open when using the clinometer. The instrument is held before the reading eye so that the scale can be read through the optics, and the round side-window faces to the left.

The instrument is aimed at the object by raising or lowering it until the hairline is sighted against the point to be measured.

At the same time the position of the hair line against the scale gives the reading. Owing to an optical illusion the hair line (crosshair) seems to continue outside the frame and is thus easily observed against the terrain or the object.

