**LAB: Gradient Measurement**

**Background/Overview**: Students will explore how the terms elevation, distance and gradient are related.

**Objectives:** Students will:

1. Measure the change in elevation between 2 points.
2. Measure the distance between 2 points.
3. Calculate gradient between 2 points.

**Prelab Questions:**

1. What is the general equation for calculating gradient?

**Data Table:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Diagram of Item on Table to be measured**  -Show with arrows where you measured both elevation & distance | **Difference in Elevation between the 2 points (mm)** | **Distance between the 2 points (cm)** | **Gradient Equation** | **Gradient Answer- INCLUDE UNITS** |
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**Post Lab Analysis**

1. Did steeper slopes have a larger or smaller gradient value? Support your answer with a comparison using QUANTITATIVE data.
2. If an area is totally flat, what is its gradient?
3. On a scale of 1-5, with 5 being a very good understanding and 1 being very confused, what number would you give your understanding of:
   1. The meaning of gradient?
   2. The difference between elevation vs. difference?
   3. Calculating gradient?
4. If you answered with a 1-4 for questions 4a-c, what questions do you still have? What might help you gain better understanding?