Lab 2: Electric Field and Potential

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PHYS 236 — Fall 2022

Date performed: 09/21/2022

1 Purpose

To study the relationship between electric field and the electric potential difference associated with it.

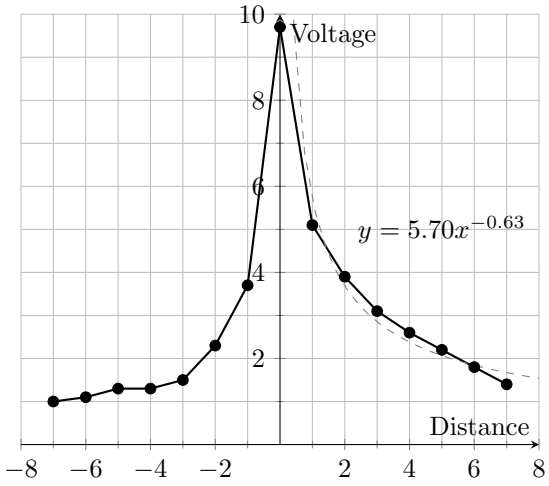
2 Theory

The relationship between the electric field and electric potential difference will follow the equation $\Delta V = -\int_a^b \vec{E} \cdot ds$, which simplified is $\Delta V = \frac{k_e q}{r}$. This means electric potential will have a opposite yet linear relationship with the electric field, while having an inverse relationship with distance.

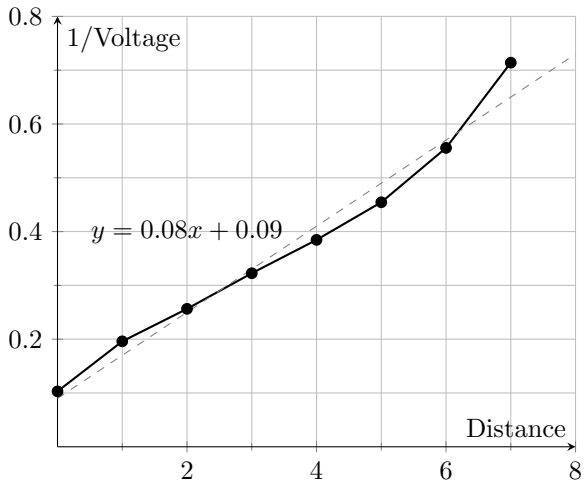
3 Experiment Analysis

4 Procedure

5 Data and Graphs



[Fig 1.1] Table 1.1 visualized in a graph.



[Fig 1.2] The linearization of Fig 1.1.

6 Results

7 Questions

8 Conclusion