Criteria: a peer should be able to reproduce the same results with the same equipment.

Lab partner:
Objective:
Equipment:

Function:
Digital Multimeter: Fluke 8505A

ID:
EE4089 (or serial number)

Decade Resistance Box: Leeds and Northrup (1-10kΩ)
no serial number

Procedure:
circuit diagram for all measurements

HP3411A
V

EE4321

\[ V = V_1 + \frac{R_1}{R_2} \\]

\[ V_0, V_r \text{ measured with Fluke 8505A EE4089} \]

\[ R_1 = 1 \text{ kΩ (set by dial)} \]

define all variables, identify all instruments uniquely

Tables:

<p>| Table I: Measurement of ( R_2 ) |</p>
<table>
<thead>
<tr>
<th>V (V)</th>
<th>( V_1 (V) )</th>
<th>( V_0 (V) )</th>
<th>( I_0 (mA) )</th>
<th>( R_2 (kΩ) )</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>1</td>
</tr>
</tbody>
</table>

Sample calculations:

\[ I_0 = \frac{V_1}{R_1} = \frac{10 \text{ V}}{1 \text{ kΩ}} = 10 \text{ mA} \]

\[ R_2 = \frac{V_0}{I_0} = \frac{10 \text{ V}}{10 \text{ mA}} = 1 \text{ kΩ} \]

Figures:

Output Current, \( I_0 \) (mA)

Output Voltage, \( V_0 \) (V)

Note: \( R_2 = 1 \text{ kΩ} \)

Figure 1: Output Current Characteristics

State what you did; note any problems or special conditions; use same numbering scheme as lab manual instructions

Conclusions: state results with respect to objective; explain any discrepancies, and discuss any problems; any conclusions learned from experience

Format should be a thoughtful, reflective paragraph

Note: answer all questions in procedure section using lab manual numbering