

practicle write up (equipment didnt work)

Fixed resister

$$V=IR$$

V/V	I/A
1	0.09
2	0.18
3	0.27
4	0.35
5	0.45
-1	-0.1
-2	-0.18
-3	-0.27
-4	-0.35
-5	-0.45

directly proportional

poli

$$1 = 0.09 \times R$$

$$\frac{1}{0.09} = R = 11.1 \Omega$$

negative

Diode

V	I
1	0.05
2	0.06
3	0.1
4	0.65
5	1.55
-1	0
-2	0
-3	0
-4	0
-5	0

only let current go in one direction

Filament Lamp

V	I
1	0.18
2	0.26
3	0.27
4	0.29
5	0.3
-1	-0.17
-2	-0.25
-3	-0.26
-4	-0.29
-5	-0.3

exponential proportion

$$y = kx^2$$

$$\frac{dy}{dx} = 2kx$$

resistance = 0 by heat

ohmic devices
Ohm's Law: current is directly proportional to potential difference at a fixed temperature

