

Quiz → Tomorrow 3/4

- Equivalent resistance of resistory-only circuit
- Voltage, Current, and Power of any resistor
- Kirchhoff's Rules

Resistors:

$$R = \frac{\rho l}{A}$$

ρ → resistivity
 l → length
 A → cross-sectional area
 R → Resistance

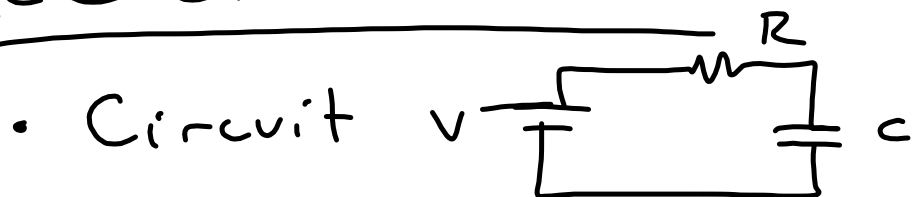
$$\vec{E} = \rho \vec{J}$$

\vec{E} → electric field
 ρ → resistivity
 \vec{J} → current density

$$I = N e v_d A$$

I → current
 N → number of charge carriers per unit volume
 e → electron
 v_d → drift velocity
 A → cross-sectional area

RC CIRCUIT LAB



- We can change R or C and find time it takes to charge/discharge
 - For each value of R and C , find time it takes
 - Do at least 2 C values with 5 R values per C