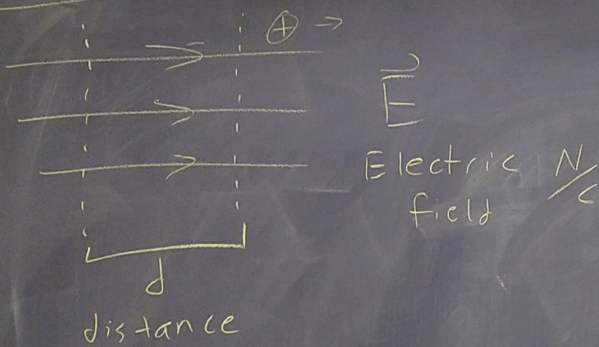


Electric Potential



$$\Delta V = \vec{E} \cdot d$$

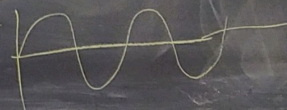
Voltage = (Electric Field) (Distance)
 (Electric Potential)
 measured in Volts

electric current - rate at which charge carriers move through a given area.
 (flow of electrons)

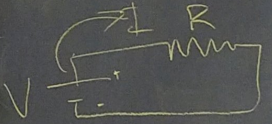
$$I = \frac{\Delta Q}{\Delta t} \quad \text{Current} = \frac{\text{charge}}{\text{time}}$$

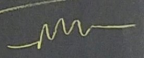
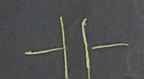
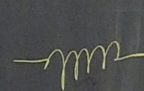
measured in Amps (A)

DC - Direct current,
 Flow in one direction
 $\longrightarrow I$

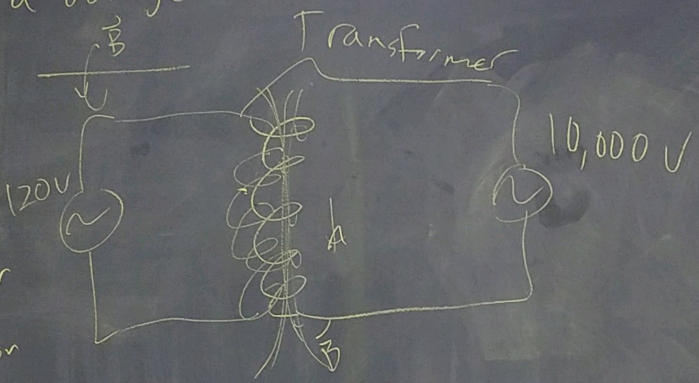
AC - Alternating Current,
 Flows back & forth
 $\longleftrightarrow I$ 

Circuit - path in which electrons from a voltage source flows



- Circuit element
-  Resistor
 -  Capacitor
 -  Inductor

Ohm's law $V = IR$



Today
 Electric Potential
 (Voltage)
 Current
 Circuits