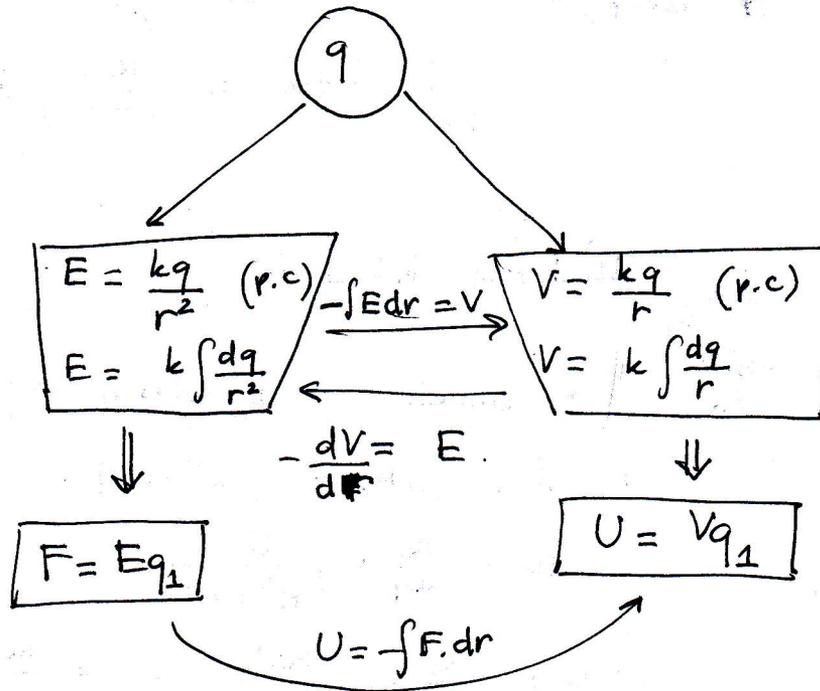


Electrostatic:



q_{\perp} : different charge in the field of q .

Current: $I = \frac{dQ}{dt}$

$P = \frac{dU}{dt} = \frac{VdQ}{dt}$
 $= VI$

Moving electric charge \rightarrow magnetism.

$|\vec{F}_B| = |q\vec{v} \times \vec{B}| = qvB \sin\theta$
 \uparrow angle between \vec{v} & \vec{B} .

\vec{B} : equiv. of \vec{E} in magnetism.

Charge moving in magnetic field & electric field:

$\vec{F} = q\vec{E} + q\vec{v} \times \vec{B}$: e.m. force on 1 particle.

$\vec{F} = I\vec{L} \times \vec{B}$: e.m force on a current

Biot-Savart law: to find ~~elect~~ mag. field at a point P due to a current (moving charges) collection of