

Electrostatics	$F = qE$ <p>F = electric force q = electric charge E = electric field</p>	$U = Fd$ <p>U = electric potential energy F = electric force d = distance between particle and source of electric field</p>	$V = \frac{U}{q}$ <p>V = electric potential U = electric potential energy q = electric charge</p>
Coulomb's Law	$F_e = k \frac{q_1 q_2}{d^2}$ <p>F_e = electric force k = $8.99 \times 10^9 \text{ N} \cdot \frac{\text{m}^2}{\text{C}^2}$ q = electric charge d = distance between charges</p>		
Electric Fields	$E = \frac{F_e}{q}$ <p>E = electric field F_e = electric force q = electric charge</p>		

Electric Potential Difference	$U = qEd$ <p>U = electric potential energy q = electric charge E = electric field d = distance between charges</p>	$V = k \frac{q}{d}$ <p>V = electric potential k = $8.99 \times 10^9 \text{ N} \cdot \frac{\text{m}^2}{\text{C}^2}$ q = electric charge d = distance between charges</p>	$\Delta V = V_2 - V_1$ <p>ΔV = electric potential difference (voltage) V_2 = electric potential at second position V_1 = electric potential at first position</p>
	$\Delta V = \frac{\Delta U}{q}$ <p>ΔV = electric potential difference (voltage) ΔU = change in electric potential energy q = electric charge</p>	$\Delta V = Ed$ <p>ΔV = electric potential difference (voltage) E = electric field d = distance between charges</p>	$W = q\Delta V$ <p>W = work q = electric charge ΔV = electric potential difference (voltage)</p>
Ohm's Law	$I = \frac{\Delta q}{t}$ <p>I = current Δq = change in electric charge t = time</p>	$I = \frac{\Delta V}{R}$ <p>I = current ΔV = electric potential difference (voltage) R = resistance</p>	
Electric Circuits	$R_{eq} = R_1 + R_2 + R_3 + \dots R_n$	$I = \frac{V}{R_{eq}} = \frac{V}{R_1 + R_2 + R_3 + \dots R_n}$ <p>I = current</p>	$\frac{1}{R_{eq}} = \frac{1}{R_1} + \frac{1}{R_2} + \frac{1}{R_3} + \dots \frac{1}{R_n}$ <p>R_{eq} = equivalent resistance in</p>

	R_{eq} = equivalent resistance in series circuit R_n = resistance in nth resistor	ΔV = electric potential difference (voltage) R_{eq} = equivalent resistance in series circuit	parallel circuit R_n = resistance in nth resistor
	<div style="border: 1px solid black; border-radius: 10px; padding: 5px; display: inline-block; margin-bottom: 10px;"> $I = I_1 + I_2 + I_3 + \dots I_n$ </div> I = equivalent current in parallel circuit I_n = current in nth branch		