Notation

Common symbols

1 DISCLAIMER

This is not an exhaustive list, and people aren't always consistent in their notation (eg. Φ_E *is electric flux* may not apply to the situation you're dealing with.). The idea was to give you something to jog your memory. The SI units I list *are* accurate for the named quantity (eg. electric field in N/C), but again, people don't always use standard SI units. Use these at your own risk.

2 Chapter 19: Electric Forces and Electric Fields

Symbol	Name	SI units	other unit names
F	Force	kg m/s^2	N (newtons)
q	Charge	C (coulombs)	
E	Electric field	kg m/s^2 C	N/C = V/m
Φ_E	Electric flux	kg m^3/s^2 C	N m^2/C
A	Area vector	m^2	
ρ (rho)	Charge per unit volume	C/m^3	
σ (sigma)	Charge per unit area	C/m^2	
λ (lambda)	Charge per unit length	C/m	

3 Chapter 20: Electric Potential and Capacitance

Symbol	Name	SI units	other unit names
U	Potential energy	kg m^2/s^2	J (joules)
V	Electric potential	kg m^2/s^2 C	J/C = V (volts)
C	Capacitance	C^2 s^2 / kg m^2	C/V = F (farads)
κ (kappa)	Dielectric constant	Unitless	