

Electrostatics Constant Cover Sheet

Electrostatics Constants Sheet

You will be given a new copy of this sheet for your test. None of the values on this page need to be memorized.

$e = 1.60 \times 10^{-19}$ C (Elementary charge, assumed positive unless noted otherwise.)

$1 \text{ eV} = 1.60 \times 10^{-19}$ J

$C = 6.25 \times 10^{18}$ elementary charges

$1 \text{ J} = 6.25 \times 10^{18}$ eV

electron's charge = -1.6×10^{-19} C

electron's mass = 9.109×10^{-31} kg

proton's charge = 1.6×10^{-19} C

proton's mass = 1.672×10^{-27} kg

constant in coulomb's Law: $k = 2.306 \times 10^{-28} \left(\frac{\text{Nm}^2}{\text{e}^2} \right) = 8.99 \times 10^9 \left(\frac{\text{Nm}^2}{\text{C}^2} \right)$