

Constants' Sheet.

1 in = 2.54 cm,1 gallon = 3.786 liters,

1 gallon = 3.786 liters 1 gallon = 4 quart,

 $g = +9.8 \text{ m/s}^2,$

1 nautical mile = 1852 m,

Electrical Conductivity of Copper = $\sigma_{\text{Cu}} = 5.814 \times 10^{+7} \text{ S/m}$,

Density of Copper = $\rho_{\text{Cu}} = 8.9 \text{ gcm}^{-3}$,

 $\epsilon_0 = 8.85 \times 10^{-12} \text{ F/m},$

 $k = 9.0 \times 10^9 \text{ Nm}^2/\text{kg}^2.$

CONSTANTS:

Coulomb's constant: $k = 1/(4\pi\epsilon_0) = 8.99 \times 10^9 \text{ N} \cdot \text{m}^2/\text{C}^2$

Permittivity: $\varepsilon_0 = 8.85 \times 10^{-12} \text{ C}^2 / \text{ N} \cdot \text{m}^2$

Permeability: $\mu_0 = 4 \pi \times 10^{-7} \text{ T} \cdot \text{m/A}$

Electron charge: $e = -1.602 \times 10^{-19} \text{ C}$ Proton charge: $p = 1.602 \times 10^{-19} \text{ C}$

Proton charge: $p = 1.602 \times 10^{-19} \text{ C}$ Mass of an electron: $m_e = 9.1094 \times 10^{-31} \text{ kg}$

Mass of a proton: $m_p = 1.67 \times 10^{-27} \text{ kg}$ Planck's constant: $h = 6.63 \times 10^{-34} \text{ Js}$

Gravitational acceleration at Earth's surface: $g = 9.8 \text{ m/s}^2$

Speed of light in vacuum: $c = 3.00 \times 10^8 \text{ m/s}$ $eV = 1.6 \times 10^{-19} \text{ J}$

 $hc = 1240 \text{ eV} \cdot nm$