$$\vec{\nabla}\cdot\vec{E} = \frac{\rho}{\varepsilon_o}$$

$$\vec{\nabla}\cdot\vec{B} = 0$$

$$\vec{\nabla}\times\vec{E} + \frac{\partial\vec{B}}{\partial t} = 0$$

$$\vec{\nabla}\times\frac{\vec{B}}{\mu_o} - \varepsilon_o\frac{\partial\vec{E}}{\partial t} = \vec{J}$$

$$\nabla^2\vec{E} - \mu_o\varepsilon\frac{\partial^2\vec{E}}{\partial t^2} = 0$$

$$I(\theta) = \frac{p_0^2\omega^4}{32\pi^2c^3\epsilon_0}\frac{\sin^2\theta}{r^2}$$

$$\frac{\partial^2 x}{\partial t^2} + \gamma\frac{\partial x}{\partial t} + \omega_o{}^2 x = \frac{q}{m}E_o e^{i\omega t}$$

$$\vec{P}(\omega) = q_e N\vec{x} = (\varepsilon - \varepsilon_o)\vec{E}(\omega)$$

$$\vec{P}(\omega) = \frac{q_e^2 N}{m_e}\frac{1}{\omega_o^2 - \omega^2 - i\omega\gamma}\vec{E}(\omega)$$

$$\tilde{n} = \sqrt{\tilde{K}}$$

$$I(z) = I_o e^{-\alpha z}$$

$$\vec{S} \equiv \vec{E}\times\frac{\vec{B}}{\mu_o}$$

$$I = \frac{n\varepsilon_o c}{2}E_o{}^2$$

$$I = uc$$

$$\vec{p} = \hbar\vec{k}$$

$$\mathcal{P} = u$$

$$\varepsilon_o = 8.854\times10^{-12}\ \mathrm{C^2/N\cdot m^2}$$

$$\mu_o = 4\pi\times10^{-7}\ \mathrm{T\cdot m/A}$$

$$c = 2.9979\times10^{8}\ \mathrm{m/s}$$

$$q_e = 1.602\times10^{-19}\mathrm{C}$$

$$m_e = 9.108\times10^{-31}\mathrm{kg}$$

$$k_B = 1.380\times10^{-23}\ \mathrm{J/K}$$

$$h = 6.626\times10^{-34}\mathrm{J\cdot s}$$

$$\hbar = h/2\pi = 1.054\times10^{-34}\mathrm{J\cdot s}$$

$$\sigma = 5.670\times10^{-8}\ \mathrm{W/m^2\cdot K^4}$$

Note:
Some important simple things are not given: relations between λ, ω, k, c ; photon energy, Snell's law, $v = \sqrt{\frac{1}{\mu\varepsilon}}$, definition of K, etc