$\mathbf{E}(\mathbf{x}) = \frac{1}{4\pi\epsilon_0}\int \rho(\mathbf{x}')\frac{\mathbf{x}-\mathbf{x}'}{\lvert\mathbf{x}-\mathbf{x}'\rvert^3}d^3x'$	Coulomb's Law (1.5)
$\delta(f(x)) = \sum_i \frac{1}{\left\lvert\frac{\mathrm{d}f}{\mathrm{d}x}(x_i)\right\rvert}\delta(x-x_i)$	Delta function Rule 5
$\oint_S \mathbf{E}\cdot\mathbf{n}\,da = \frac{1}{\epsilon_0}\int_V \rho(\mathbf{x})d^3x$	Gauss' Law (1.11)
$\Phi(\mathbf{x}) = \frac{1}{4\pi\epsilon_0}\int \frac{\rho(\mathbf{x}')}{\lvert\mathbf{x}-\mathbf{x}'\rvert}d^3x'$	Scalar potential in terms of charge density (1.17)
$(\mathbf{E_2}-\mathbf{E_1})\cdot\mathbf{n} = \sigma/\epsilon_0$	Electric field of a surface distribution (1.22)
$\nabla^2\Phi = -\rho/\epsilon_0$	Poisson Equation (1.28)
$\nabla^2\Phi = 0$	Laplace Equation (1.29)
$\nabla^2\left(\frac{1}{\lvert\mathbf{x}-\mathbf{x}'\rvert}\right) = -4\pi\delta(\mathbf{x}-\mathbf{x}')$	Laplace's equation for a point charge (1.31)
$G(\mathbf{x},\mathbf{x}') = \frac{1}{\lvert\mathbf{x}-\mathbf{x}'\rvert} + F(\mathbf{x},\mathbf{x}')$	Green's function for Poisson's equation (1.40)
$\Phi(\mathbf{x}) = \frac{1}{4\pi\epsilon_0}\int_V \rho(\mathbf{x}')G_D(\mathbf{x},\mathbf{x}')d^3x' = \frac{1}{4\pi}\oint_S(\mathbf{x}')\frac{\partial G_D}{\partial n'}da'$	Green's function potential Dirichlet B.C.s (1.44)
$\Phi(\mathbf{x}) = \langle\Phi\rangle_S + \frac{1}{4\pi\epsilon_0}\int_V \rho(\mathbf{x}')G_N(\mathbf{x},\mathbf{x}')d^3x + \frac{1}{4\pi}\oint_S\frac{\partial\Phi}{\partial n'}G_N da'$	Green's function potential Neumann B.C.s (1.46)
$W = \frac{\epsilon_0}{2}\int \lvert\nabla\Phi\rvert^2 d^3x = \frac{\epsilon_0}{2}\int \lvert\mathbf{E}\rvert^2 d^3x$	Energy stored in electric field (1.54)
$V_i = \sum_{j=1}^{n} p_{ij}q_j,\ (i=1,2,...,n)$	Potentials on conductors in terms of the inverse capacitance matrix.
$Q_i = \sum_{j=1}^{n} C_{ij}V_j,\ (i=1,2,...,n)$	Charges on conductors in terms of the capactiance matrix (1.62)
$W = \frac{1}{2}\sum_{i=1}^{n} Q_iV_i = \frac{1}{2}\sum_{i=1}^{n}\sum_{j=1}^{n} C_{ij}V_iV_j$	Potential energy of conductor system (1.62)
$q' = -\frac{a}{y}q, \quad y' = \frac{a^2}{y}$	Magnitude and position of image charge on sphere (2.4)
$\Phi = -E_0\left(r - \frac{a^3}{r^2}\right)$	Electric field of conducting sphere in uniform Electric field (2.14)
$\frac{1}{\lvert\mathbf{x}-\mathbf{x}'\rvert} = 4\pi\sum_{\ell=0}^{\infty}\sum_{m=-\ell}^{\ell}\frac{1}{2\ell+1}\frac{r_<^\ell}{r_>^{\ell+1}}Y_{\ell m}^*(\theta',\phi')Y_{\ell m}(\theta,\phi)$	Green's function expansion in spherical coordinates (3.70)

Where $r_<(r_>)$ is the smaller (larger) of $\lvert\mathbf{x}\rvert$ and $\lvert\mathbf{x}'\rvert$

	Wiggly	Decaying
Cartesian	$e^{\pm ik_nx},\ A\cos(k_nx)+B\sin(k_nx)$	$e^{\pm k_nx},\ A\cosh(k_nx)+B\sinh(k_nx)$
Cylindrical (3D)	$e^{im\phi},\ J_m(k_n\rho),\ Y_m(k_n\rho)$	$I_m(k_n\rho),\ K_m(k_n\rho)$
Cylindrical (2D)	$e^{im\phi}$	$A_0+B_0\ln\rho+\sum A_m\rho^m+B_m\rho^{-m}$
Spherical (ϕ symmetry)	$P_\ell(\cos\theta)$	$A\left(\frac{r}{a}\right)^\ell + B\left(\frac{r}{a}\right)^{-(\ell+1)}$
Spherical (No ϕ symmetry)	$Y_{\ell m}(\theta,\phi)$	$A\left(\frac{r}{a}\right)^\ell + B\left(\frac{r}{a}\right)^{-(\ell+1)}$