MAXWELL'S EQUATIONS

$\varepsilon_0 \oint_S \overrightarrow{E} \bullet d\overrightarrow{A} = q_{enc}$	Gauss' Law for Electricity
$\oint_S \overrightarrow{B} \bullet d\overrightarrow{A} = 0$	Gauss' Law for Magnetism (magnetic monopoles do not exist)
$\oint_C \overrightarrow{E} \bullet d\overrightarrow{s} = -\frac{d}{dt}\int_S \overrightarrow{B} \bullet d\overrightarrow{A}$	Faraday's Law
$\oint_C \overrightarrow{B} \bullet d\overrightarrow{s} = \mu_0 i_{c_{enc}} + \mu_0 i_{d_{enc}}$ $\oint_C \overrightarrow{B} \bullet d\overrightarrow{s} = \mu_0 i_{c_{enc}} + \mu_0 \varepsilon_0 \frac{d}{dt}\int_S \overrightarrow{E} \bullet d\overrightarrow{A}$ $\mu_0 \varepsilon_0 = \frac{1}{c^2}$, where c = Speed of light	Ampere-Maxwell Law

$$\varepsilon_0 \oint_S \overrightarrow{E} \cdot d\overrightarrow{A} = q_{enc}$$

$$\oint_S \overrightarrow{B} \cdot d\overrightarrow{A} = 0$$

$$\oint_C \overrightarrow{E} \cdot d\overrightarrow{s} = -\frac{d}{dt}\int_S \overrightarrow{B} \cdot d\overrightarrow{A}$$

$$\oint_C \overrightarrow{B} \cdot d\overrightarrow{s} = \mu_0 i_{c_{enc}} + \mu_0 \varepsilon_0 \frac{d}{dt}\int_S \overrightarrow{E} \cdot d\overrightarrow{A}$$