Maxwell's Equations:

There are 2 "rotational" eqs. for $\vec{E}$ and $\vec{B}$.

$$\vec{\nabla} \times \vec{E} = -\frac{\partial \vec{B}}{\partial t} \quad \text{(Faraday's Law)}$$

$$\vec{\nabla} \times \vec{B} = \mu_0 \vec{J} + \mu_0 \epsilon_0 \frac{\partial \vec{E}}{\partial t} \quad \text{(Ampère's Law)}$$

There are 2 "divergent" eqs. for $\vec{E}$ and $\vec{B}$.

$$\vec{\nabla} \cdot \vec{E} = \frac{\rho}{\epsilon_0} \quad \text{(Gauss' Law)}$$

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

There are 2 compementary eqs. for $\vec{E}$ and $\vec{B}$.

$$\vec{D} = \epsilon_0 \vec{E}$$

$$\vec{B} = \mu_0 \vec{H}$$

Plus 1 law of current.

$$\vec{J} = \sigma \vec{E} \quad \text{(Ohm's Law)}$$