

$$\oint_S \mathbf{E} \cdot d\mathbf{A} = \int_V \frac{\rho}{\epsilon_0} dV \quad (1)$$

$$\oint_S \mathbf{B} \cdot d\mathbf{A} = 0 \quad (2)$$

$$\oint_C \mathbf{E} \cdot d\mathbf{l} = -\frac{\partial}{\partial t} \int_S \mathbf{B} \cdot d\mathbf{A} \quad (3)$$

$$\oint_C \mathbf{B} \cdot d\mathbf{l} = \mu_0 \int_S \mathbf{J} \cdot d\mathbf{A} + \mu_0 \epsilon_0 \frac{\partial}{\partial t} \int_S \mathbf{E} \cdot d\mathbf{A} \quad (4)$$