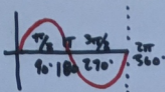


ALTERNATING CURRENT



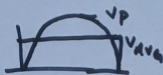
$t = \text{period}$

$$V_{\text{AVG}} = .637 \cdot V_p$$

$$I_{\text{AVG}} = .637 \cdot I$$

$$V_{\text{RMS}} = .707 \cdot V_p$$

$$I_{\text{RMS}} = .707 \cdot I$$

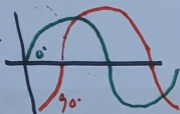


RMS = HEATING PRODUCED EQUIV. TO DC CIRCUIT

FREQUENCY

$$F = \frac{1}{t} \quad t = \frac{1}{F}$$

PHASE → ANGLE



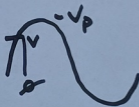
$$\text{RADIAN} = \frac{\pi \cdot \text{RAD}}{180} \cdot \text{DEG}$$

$$\text{DEGREES} = \frac{180}{\pi \cdot \text{RAD}} \cdot \text{RAD}$$

$$y = A \sin \theta$$

$$V = V_p \sin \theta$$

$$i = I \sin \theta$$



$$\text{LAG} = \phi$$

$$y = A \sin(\theta - \phi)$$



$$y = A \sin(\theta + \phi)$$



OHM'S LAW

$$V = IR \quad R_T = R_1 + R_2 + R_3 + \dots + R_N$$

$$V_S(\text{RMS}) = I_{\text{RMS}} \cdot R_T$$

KIRCHOFF'S LAW

$$V_{\text{RMS}} = V_{1\text{RMS}} - V_{2\text{RMS}}$$

SUPERPOSITION

$$V_{\text{DC}} + V_{\text{AC}}$$

