

Graphical representation of voltages

$$I = I_{max} \sin(2\pi ft) \quad (\theta = 2\pi ft)$$

$$V_L = I_{max} X_L \sin(2\pi ft + \pi/2) \longrightarrow$$

$$V_R = I_{max} R \sin(2\pi ft)$$

$$V_C = I_{max} X_C \sin(2\pi ft - \pi/2)$$

