



$$e_1 = E \cos \omega_p t \cos \omega_m t \cos \theta$$

$$e_2 = E \cos(\omega_m t + 90^\circ) \cos \omega_p t \sin \theta$$

$$e_3 = E \sin \omega_m t \cos \omega_p t \sin \theta$$

$$e_1 + e_2 = E \cos \omega_p t [\cos \omega_m t \cos \theta + \sin \omega_m t \sin \theta]$$

$$= E \cos(\omega_m t - \theta) \cos \omega_p t$$

