Electronic Networks

a) For the circuit shown in Fig. P9.55, find the steady-state expression for \( v_o \) if \( i_g = 5 \cos(8 \times 10^3 t) \) A.

b) By how many nanoseconds does \( v_o \) lag \( i_g \)?

Find the average power delivered by the ideal current source in the circuit in Fig. P10.12 if \( i_g = 30 \cos 25,000t \) mA.