## Chapter 9, Problem 30.

If a voltage  $v(t) = 100 \cos(60t + 20^\circ) \ V$  is applied to a parallel combination of a  $40\text{-}k\Omega$  resistor and a  $50\text{-}\mu\text{F}$  capacitor. Find the steady-state currents through the resistor and capacitor.