Assignment

1.2 Determine the current flowing through an element if the charge flow is given by

(a) $q(t) = (3t + 8)$ mC

(b) $q(t) = (8t^2 + 4t - 2)$ C

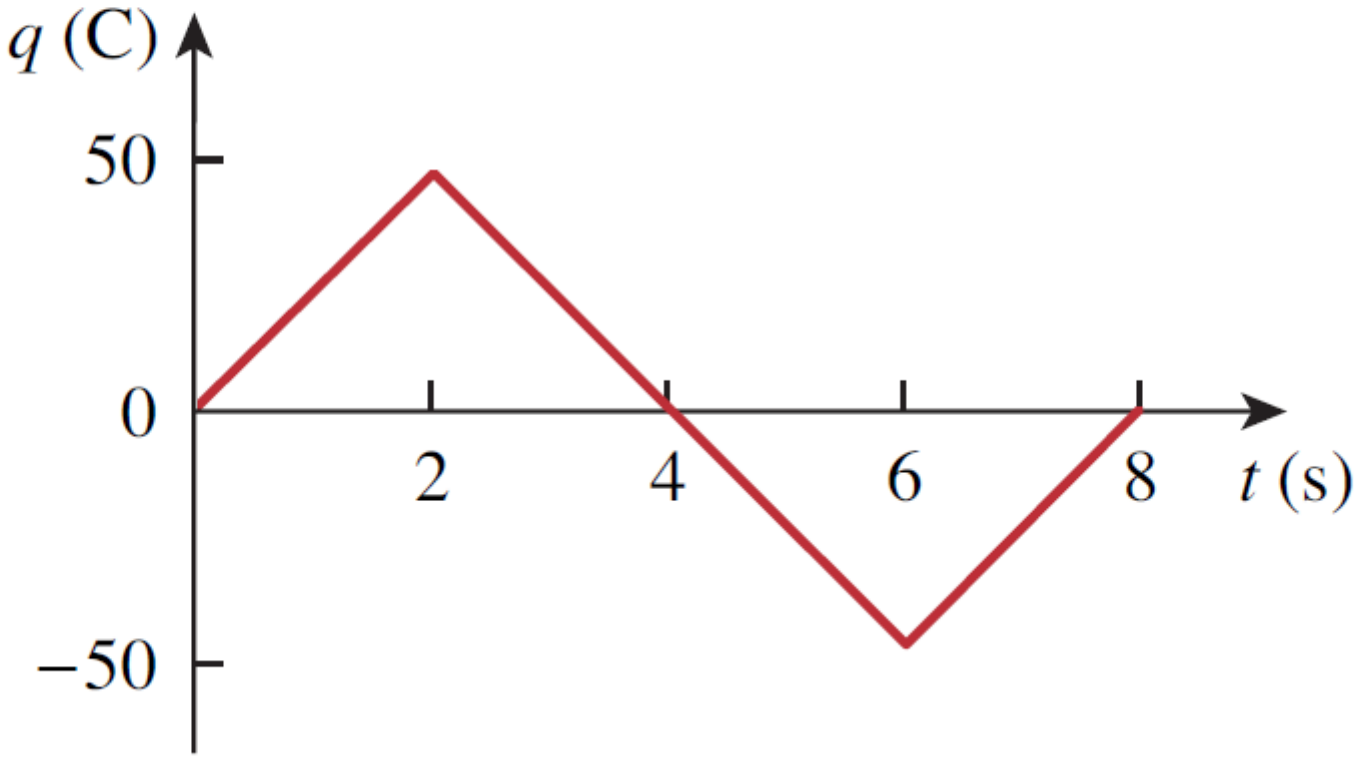
(c) $q(t) = (3e^{-t} - 5e^{-2t})$ nC

(d) $q(t) = 10 \sin 120\pi t$ pC

(e) $q(t) = 20e^{-4t} \cos 50t\,\mu$C

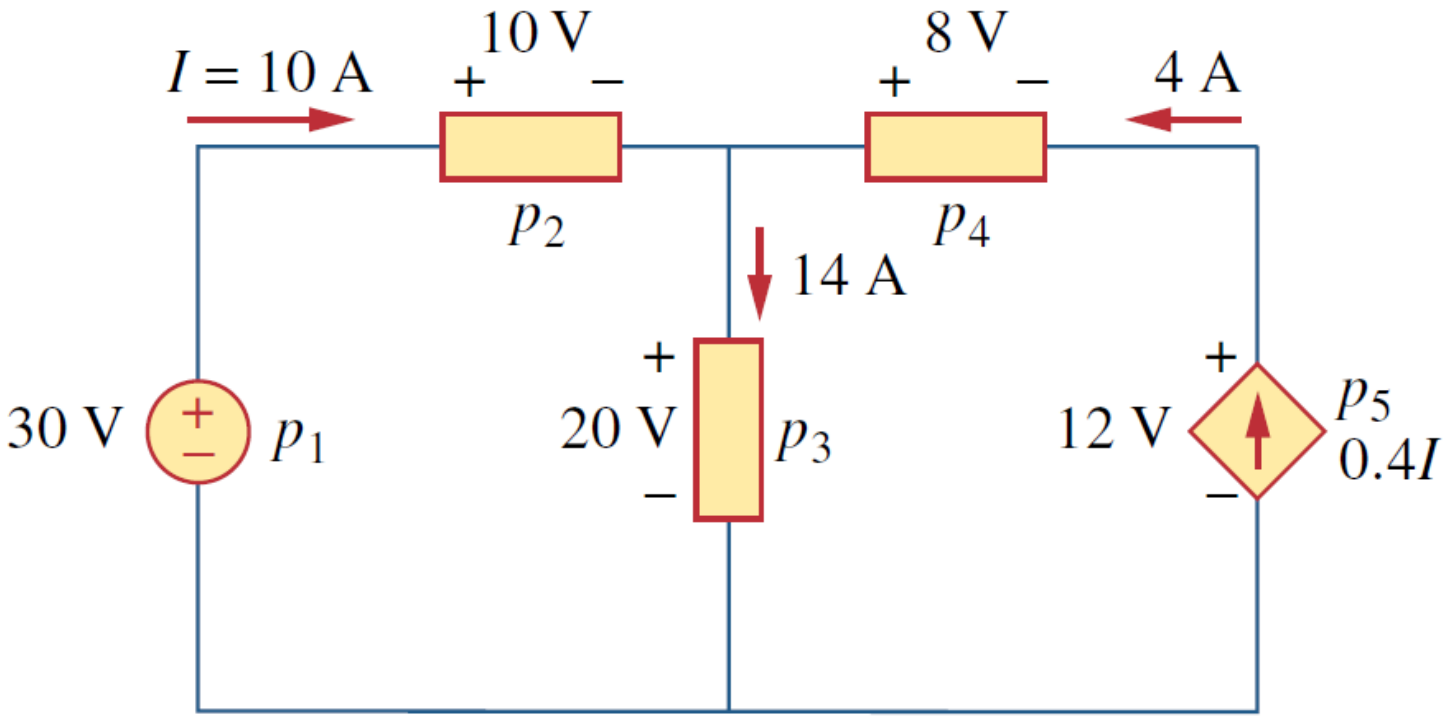
Assignment

1.7 The charge flowing in a wire is plotted in Fig. 1.24. Sketch the corresponding current.



Assignment

1.18 Find the power absorbed by each of the elements in Fig. 1.29.



Assignment

1.20 Find V_o and the power absorbed by each element in the circuit of Fig. 1.31.