D3.1

- 2 μ,F

D3.2

- 4 mH

D3.3

$$v_o(t) = 4e^{-t/0.2} \text{ V} \text{ and } i_o(t) = 2e^{-t/0.2} \text{ mA}.$$

D3.4

$$v_o(t) = 6e^{-4.5t} \text{ V}.$$

D3.7

- (a) underdamped, (b) critically damped, (c) overdamped.

D3.9

$$v(t) = -8e^{-t} + 8e^{-3t} V.$$