Chapter 11

Capacitors

11.1 (a) see text, (b) yes

11.2 (a) 4.05 Ω, (b) 2.03 Ω, (c) 7.4 A, (d) infinity, (e) zero

11.3 660 nC

11.4 (a) 4.05 Ω, (b) 3.9 μF, (c) 59 μC

11.5 (a) 450 μJ, (b) 450 μJ, (c) 9.8 J, (d) between the two

11.6 9 Ω

11.7 (a) No, (b) no, (c) yes, with the 2.4-μF capacitor in series with the two 2-μF capacitors in parallel

11.8 (a) yes, (b) the 3-μF capacitor

11.9 The capacitance doubles

11.10 6 μF

11.11 The maximum current through the circuit