**Chapter 6, Solution 21.**

4μF in series with 12μF = (4x12)/16 = 3μF
3μF in parallel with 3μF = 6μF
6μF in series with 6μF = 3μF
3μF in parallel with 2μF = 5μF
5μF in series with 5μF = 2.5μF

Hence $C_{eq}$ = **2.5μF**

**Chapter 6, Solution 51.**

$$\frac{1}{L} = \frac{1}{60} + \frac{1}{20} + \frac{1}{30} = \frac{1}{10} \qquad L = 10 \text{ mH}$$

$$L_{eq} = 10 \| (25 + 10) = \frac{10x35}{45}$$

$$= \underline{\mathbf{7.778 \text{ mH}}}$$

**Chapter 6, Solution 55.**

(a) L//L = 0.5L, L + L = 2L

$$L_{eq} = L + 2L // 0.5L = L + \frac{2Lx0.5L}{2L + 0.5L} = \underline{1.4L} = \mathbf{\underline{1.4\ L}}.$$

(b) L//L = 0.5L, L//L + L//L = L

$$L_{eq} = L//L = \mathbf{\underline{500\ mL}}$$