Chapter 6, Solution 16

The equivalent capacitance at terminals *a*-*b* in the circuit in Fig. 6.50 is 30 μF. Calculate the value of *C*.

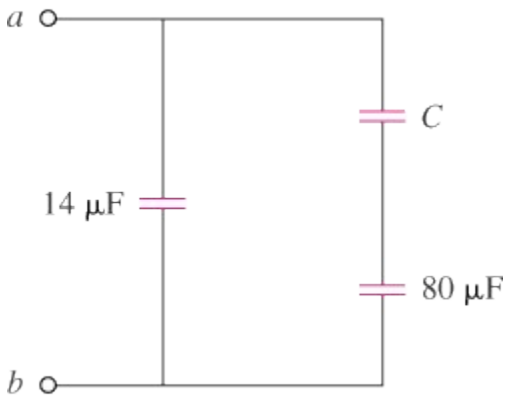

Figure 6.50
For Prob. 6.16.

Solution

$$C_{eq} = 14 + \frac{Cx80}{C+80} = 30 \rightarrow \underline{C = 20\,\mu F}$$