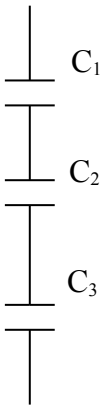
Chapter 6, Solution 20.

Consider the circuit shown below.



$C_1 = 1 + 1 = 2\mu F$

$C_2 = 2 + 2 + 2 = 6\mu F$

$C_3 = 4x3 = 12\mu F$

$1/C_{eq} = (1/C_1) + (1/C_2) + (1/C_3) = 0.5 + 0.16667 + 0.08333 = 0.75 \times 10^6$

$$C_{eq} = \mathbf{1.3333\ \mu F}.$$