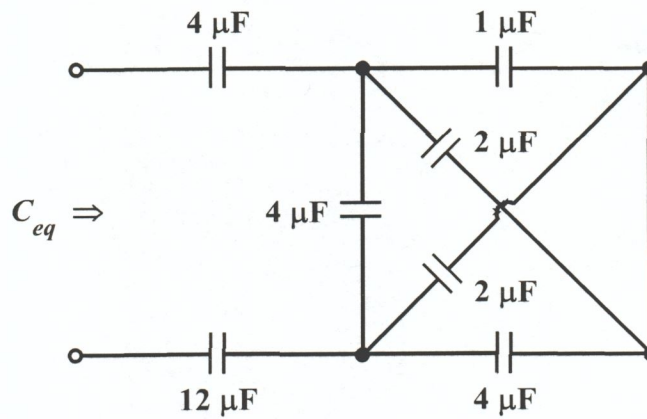
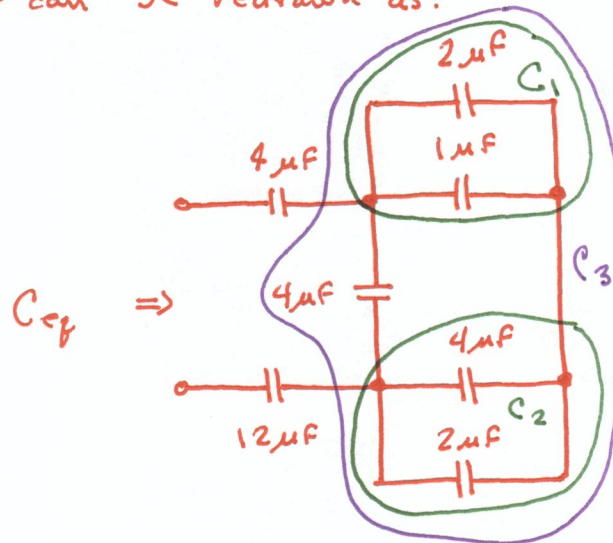


EE 2240
Problem #10

Determine the equivalent capacitance.



The circuit can be redrawn as:



$$C_1 = 2\mu\text{F} + 1\mu\text{F} = 3\mu\text{F}$$

$$C_2 = 4\mu\text{F} + 2\mu\text{F} = 6\mu\text{F}$$

$$C_3 = 4\mu\text{F} + \frac{1}{\frac{1}{C_1} + \frac{1}{C_2}} = 6\mu\text{F}$$

$$C_{eq} = \frac{1}{\frac{1}{9\mu\text{F}} + \frac{1}{C_3} + \frac{1}{12\mu\text{F}}} = 2\mu\text{F}$$