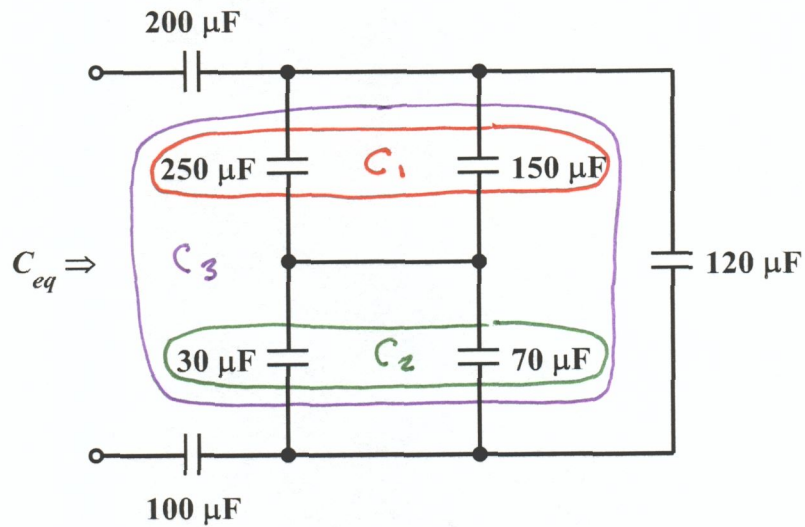


EE 2240  
Problem #03

Determine the equivalent capacitance.



$$C_1 = 250 \mu\text{F} + 150 \mu\text{F} = 400 \mu\text{F}$$

$$C_2 = 30 \mu\text{F} + 70 \mu\text{F} = 100 \mu\text{F}$$

$$C_3 = \frac{1}{\frac{1}{C_1} + \frac{1}{C_2}} = 80 \mu\text{F}$$

$$80 \mu\text{F} + 120 \mu\text{F} = 200 \mu\text{F}$$

$$C_{eq} = \frac{1}{\frac{1}{200 \mu\text{F}} + \frac{1}{200 \mu\text{F}} + \frac{1}{100 \mu\text{F}}} = 50 \mu\text{F}$$