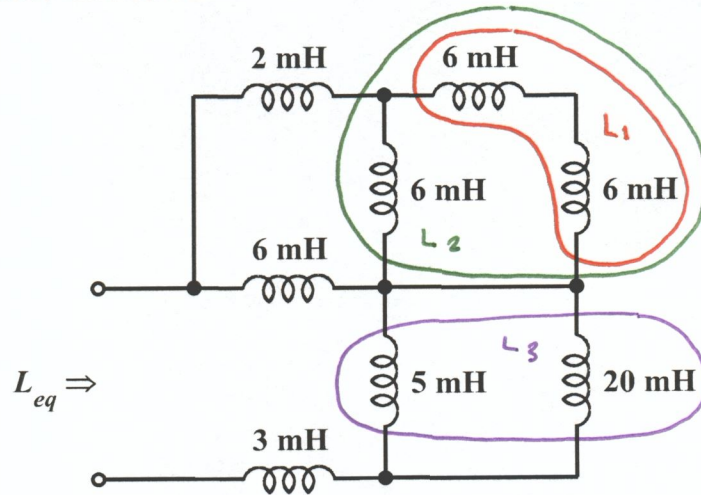


EE 2240
Problem #02

Determine the equivalent inductance.



$$L_1 = 6 \text{ mH} + 6 \text{ mH} = 12 \text{ mH}$$

$$L_2 = \frac{1}{\frac{1}{6 \text{ mH}} + \frac{1}{L_1}} = 4 \text{ mH}$$

$$L_3 = \frac{1}{\frac{1}{5 \text{ mH}} + \frac{1}{20 \text{ mH}}} = 4 \text{ mH}$$

$$L_{eq} = \frac{1}{\frac{1}{2 \text{ mH} + L_2} + \frac{1}{6 \text{ mH}}} + L_3 + 3 \text{ mH} = 10 \text{ mH}$$