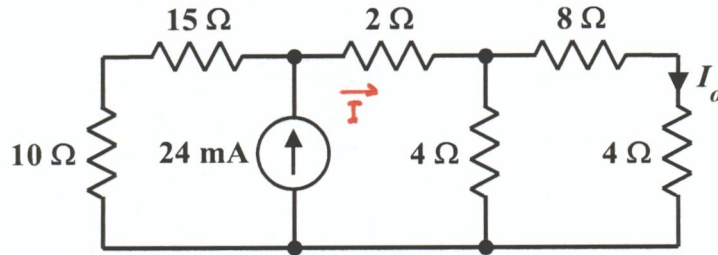


EE 2240
Problem #02

Find I_o .



On the left side,

$$R_{\text{eq, left}} = 10\Omega + 15\Omega \\ = 25\Omega$$

On the right side,

$$R_{\text{eq, right}} = 2\Omega + [4\Omega \parallel (8\Omega + 4\Omega)] \\ = 5\Omega$$

$$\therefore I = \frac{25\Omega}{25\Omega + 5\Omega} \cdot 24\text{mA} = 20\text{mA}$$

$$\text{Then } I_o = \frac{4\Omega}{4\Omega + (8\Omega + 4\Omega)} \cdot I = 5\text{mA}$$