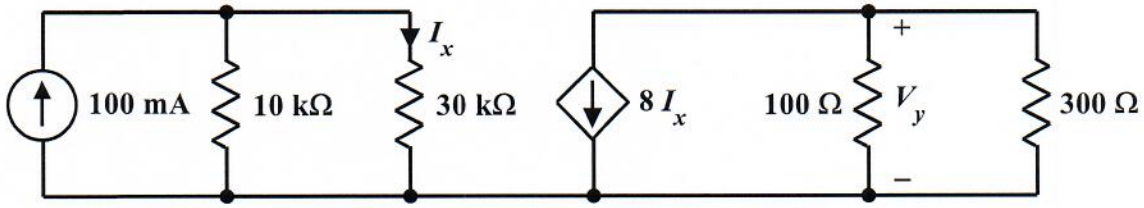
EE/EET 2240

**Homework Problem #029**




(a) Determine the value of $V_y$.

$$I_x = \frac{10k\Omega}{10k\Omega + 30k\Omega} \cdot 100mA = 25mA$$

$$8\,I_x = 200mA$$

$$V_y = -(100\Omega \| 300\Omega)(8\,I_x) = -15V$$

(b) Does the CCCS *absorb* or *deliver* power? How much?

The CCCS satisfies the PSC, so it absorbs

$$(8\,I_x)(|V_y|) = (200mA)(15V) = 3W$$