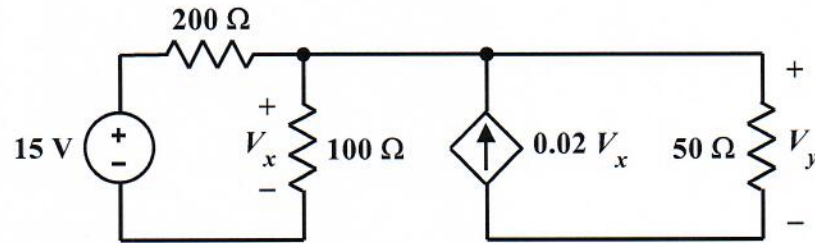


EE/EET 2240  
Homework Problem #030



(a) Determine the value of  $V_y$ .

$$V_x = \frac{100\Omega}{200\Omega + 100\Omega} \cdot 15V = 5V$$

$$V_y = (50\Omega)(0.02 \cdot 5V) = 5V$$

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

The VCCS does not satisfy the PSC, so it delivers  $(0.02 \cdot 5V)(5V) = 0.5W$  or 500mW