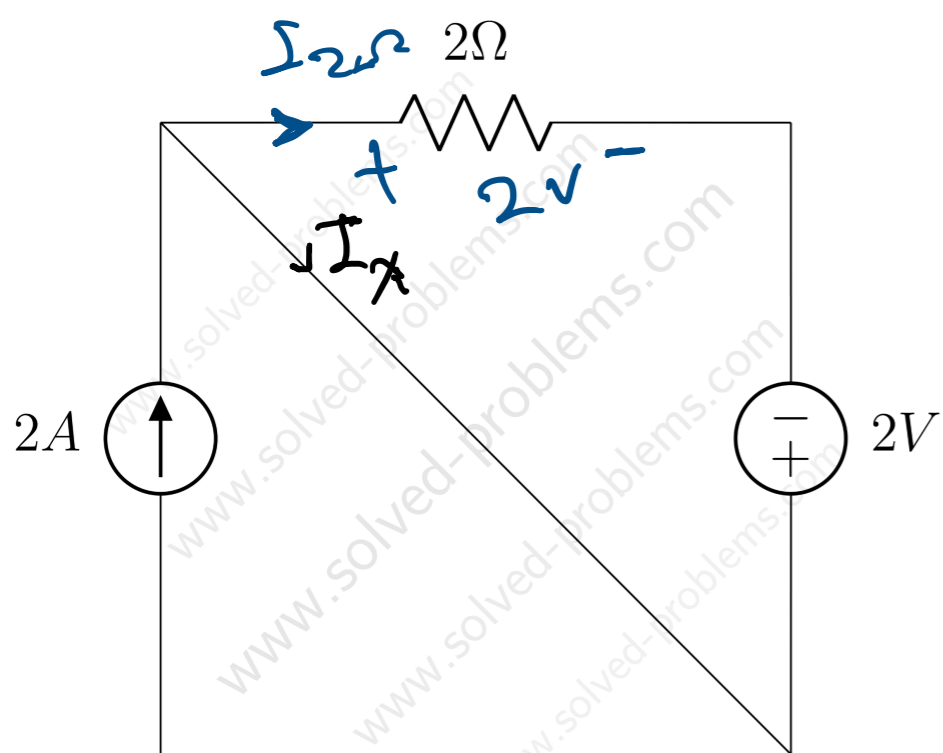


Solved the circuit to determine  $I_x$  and power absorbed or supplied by each element.



$I_x$

$$\text{Kcl: } -2A + I_x + I_{2\Omega} = 0$$

$$\boxed{I_x = 1A}$$

2A

$$V_{2A} = 0$$

$$P = VI \rightarrow P_{2A} = 0$$

2Ω

$$I_{2\Omega} = \frac{V_{2\Omega}}{R} = \frac{2V}{2\Omega} = 1A$$

$$P_{2\Omega} = +V_{2\Omega} \times I_{2\Omega} = 2 \times 1 = 2W > 0$$

absorbing ↙

$$P_{2\Omega} = \frac{V_{2\Omega}^2}{2\Omega} = 2W > 0$$

2V

$$P_{2A} + P_{2\Omega} + P_{2V} = 0 \rightarrow P_{2V} = -2W$$

supplying ↙ < 0