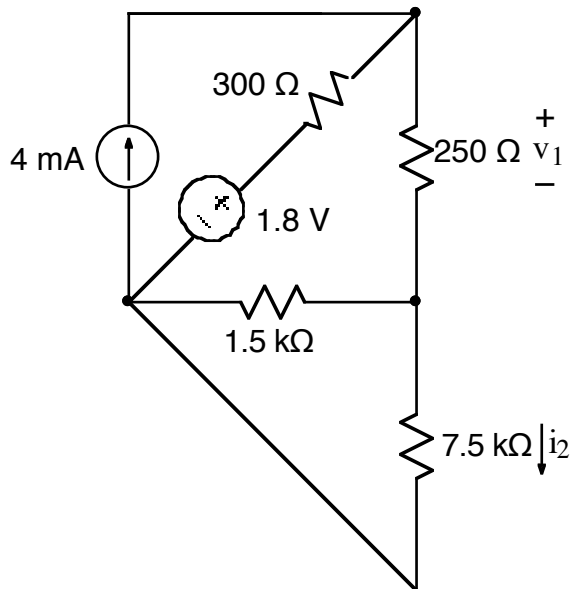


Ex:



Given $v_1 = 5/12$ V, $v_2 = 5/2$ V (across 4 mA source with + at top), and $i_2 = 5/18$ mA, calculate the power in the 300 Ω resistor.

SOL'N:

The power in the 300 Ω resistor is

$$\begin{aligned}
 p &= v \cdot i = (v_2 - 1.8\text{V}) \cdot \frac{(v_2 - 1.8\text{V})}{300\ \Omega} \\
 &= \frac{(2.5\text{V} - 1.8\text{V})^2}{300\ \Omega} = \frac{(0.7)^2}{300}\ \text{W}
 \end{aligned}$$

$$p \doteq 1.63\ \text{mW}$$