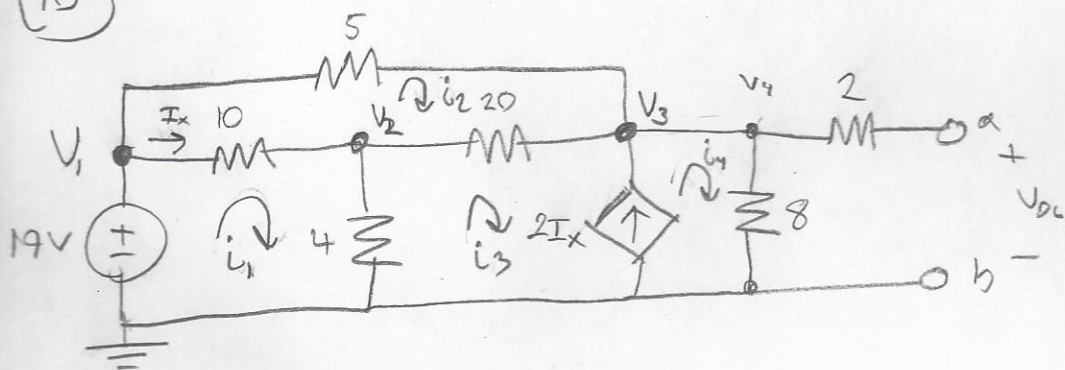


10



$$14i_1 - 10i_2 - 4i_3 = 19 = 19$$

$$-10i_1 + 35i_2 - 20i_3 = 0$$

$$-4i_1 - 20i_2 + 24i_3 - i_4 = 0$$

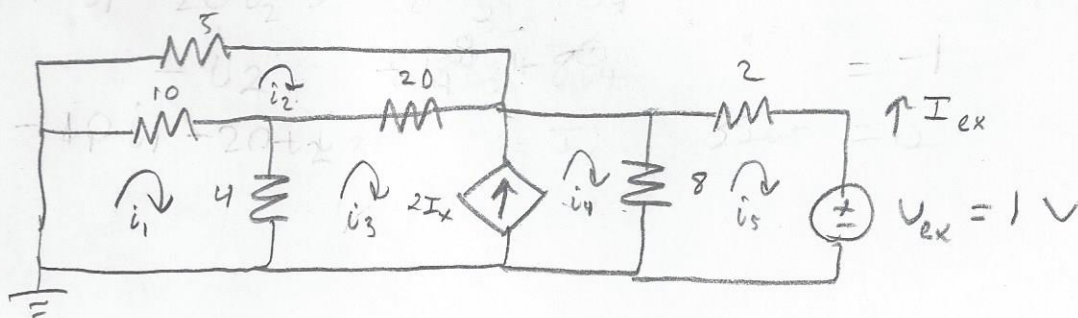
$$-i_3 + 8i_4 = 0$$

$$i_4 = 4.16 \text{ A}$$

$$\frac{V_3}{8} + \frac{V_3}{20}$$

$$V_{th} = 4.16 \text{ A} (8 \Omega)$$

$$V_{th} = 33.3 \text{ V}$$



$$14i_1 - 10i_2 - 4i_3 = 0$$

$$-10i_1 + 35i_2 - 20i_3 = 0$$

$$-4i_1 - 20i_2 + 24i_3 - i_4 = 0$$

$$-i_3 + i_4 - 8i_5 = 0$$

$$-8i_4 + 8i_5 = -1$$

$$I_{ex} = -i_5$$

$$i_5 = -0.013 \text{ A}$$

$$I_{ex} = 0.013 \text{ A}$$

$$R_{th} = \frac{33.3 \text{ V}}{0.013 \text{ A}} = 2538 \Omega$$