ECE241
Quiz #4

Determine the Thevenin equivalent circuit for the circuit below when looking across terminals a and b. The resistor values are in ohms. Be sure to draw the circuit labeling the terminals and component values.

\[ R_{th}, \ V_{th} \]

\[ V_{th} = V_{oc} \ (open \ circuit \ voltage) \]

2 V Alone

\[ U_{oc1} = -\frac{2}{4} \times 2 = -1 \ V \]

2 A Alone

\[ U_{oc2} = -2 \times 1 = -2 \ V \]

Total \[ U_{oc} = U_{oc1} + U_{oc2} \]
\[ = -1 - 2 \]
\[ = -3 \ V \]