KVL Example

\[6(i_1 + i_2) + 2i_1 - 6 = 0\]

\[i_2 = -1\]
KCL Example: Nodal Analysis

\[ \frac{(6 - V_x)}{6} - \frac{V_x}{2} + 1 = 0 \]
Thevenin Equivalent
Thevenin Equivalent

\[
\text{Slope} = -\frac{1}{R_T}
\]
Norton Equivalent
Norton Equivalent

Slope = $-\frac{1}{R_N}$
Norton-Thevenin Conversion

\[ V_T = I_N R_N \]
\[ R_T = R_N \]
Power does NOT Transform

\[ P_{oc} = 0 \]
\[ P_{sc} = \frac{V_T^2}{R_T} \]

\[ P_{oc} = I_N^2 R_N \]
\[ P_{sc} = 0 \]