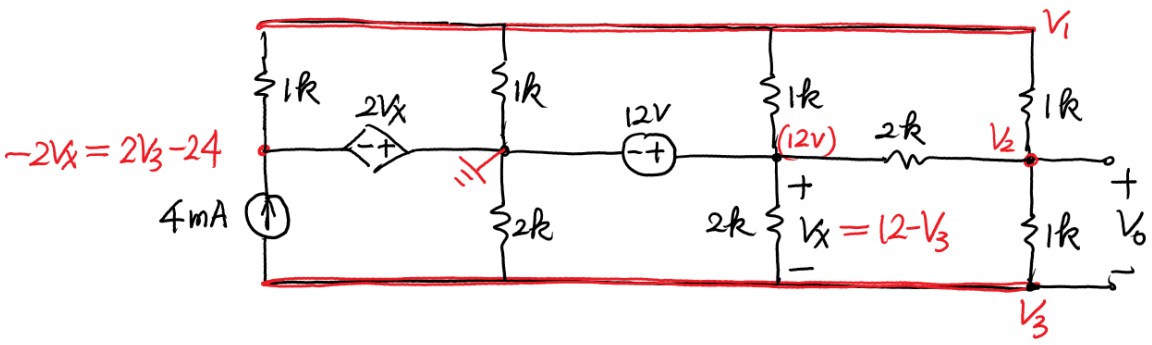
Question 1, Version 1



KCL at V_1: $\frac{V_1-(2V_3-24)}{1}+\frac{V_1}{1}+\frac{V_1-12}{1}+\frac{V_1-V_2}{1}=0$ ①

KCL at V_2: $\frac{V_2-V_1}{1}+\frac{V_2-12}{2}+\frac{V_2-V_3}{1}=0$ ②

KCL at V_3: $4+\frac{V_3}{2}+\frac{V_3-12}{2}+\frac{V_3-V_2}{1}=0$ ③

Simplify: $\begin{cases} 4V_1-V_2-2V_3=-12 \\ -2V_1+5V_2-2V_3=12 \\ -V_2+2V_3=2 \end{cases}$ Solve $\begin{cases} V_1=-1\,V \\ V_2=3\,V \\ V_3=2.5\,V \end{cases}$

$V_o=V_2-V_3=3-2.5=0.5\,V$