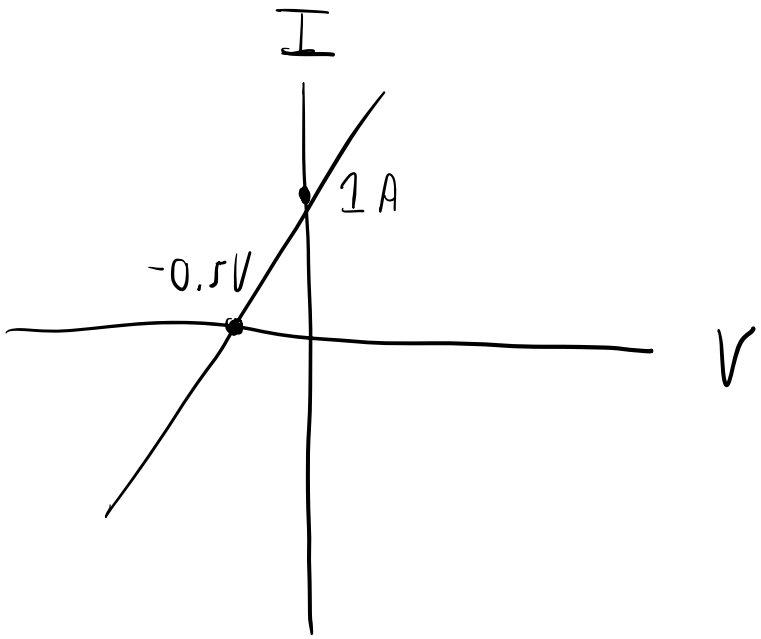
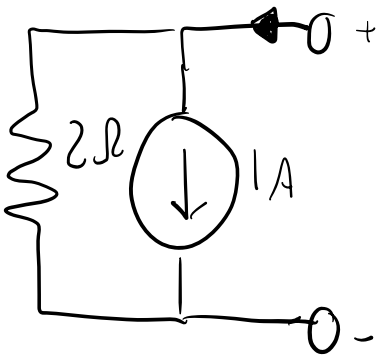
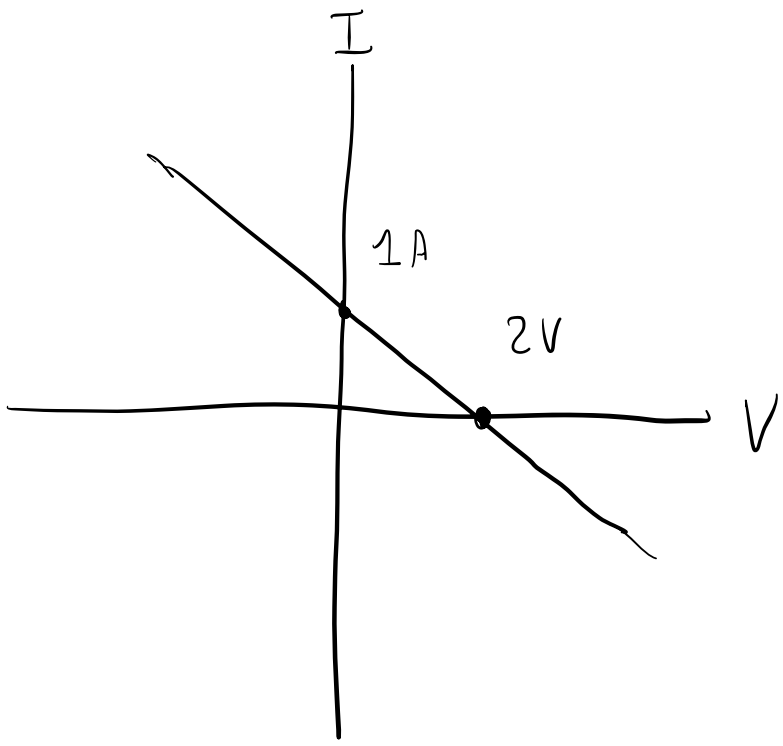
① $V_o = -0.5$ $I_r = 1A$

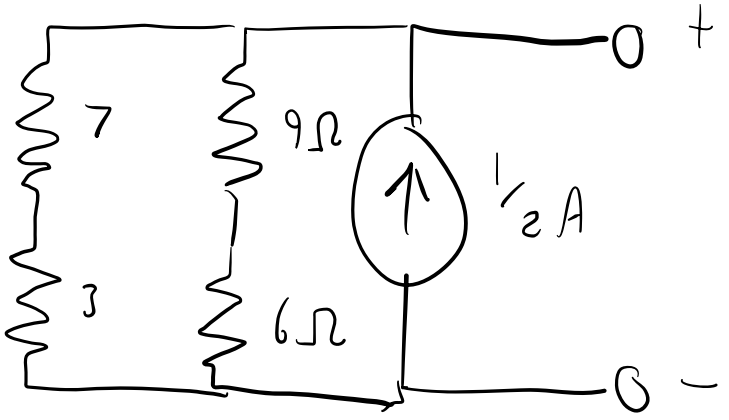


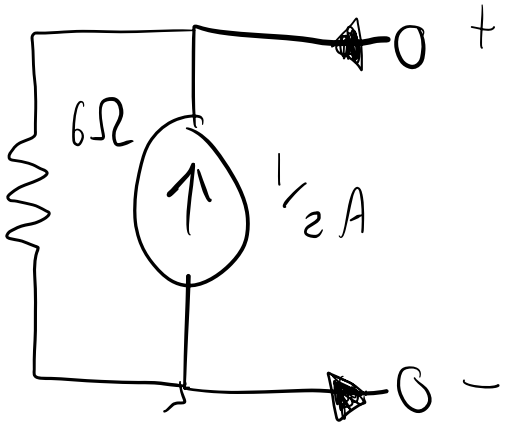
② $V_o = 2V$

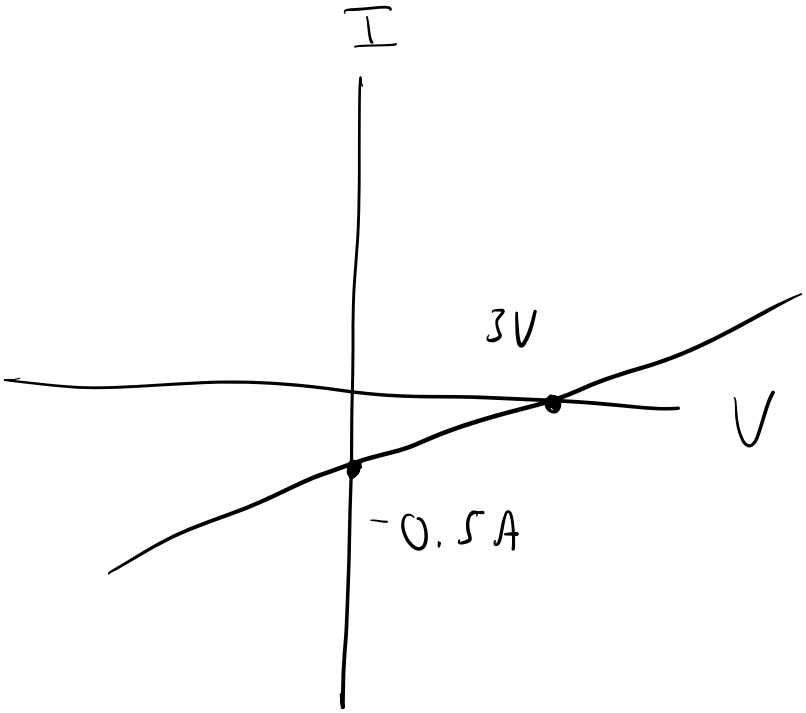




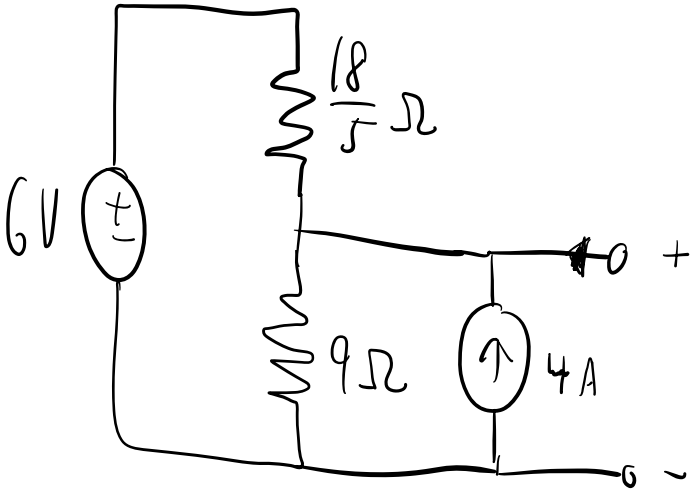
3







4



$\frac{5}{18} + \frac{2}{18} \quad \frac{7}{18}$

$V_o = \frac{5}{7} \cdot 6V +$

$6 \cdot \frac{45}{63} \quad 6 \cdot \frac{15}{21}$

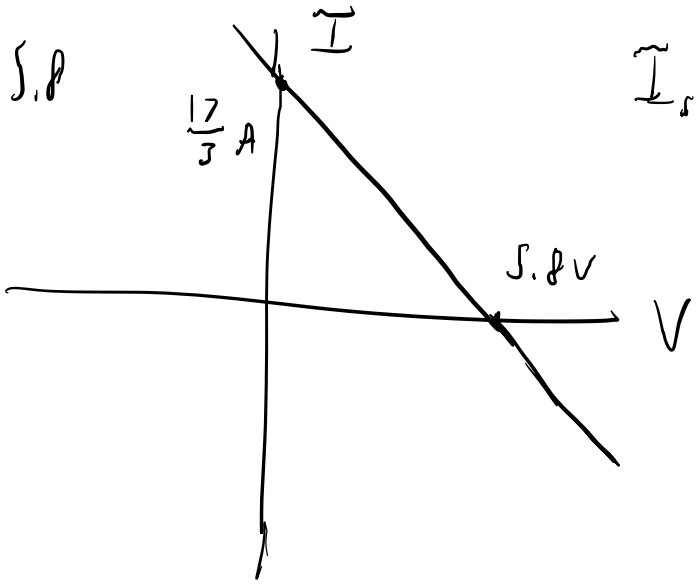
$\frac{7}{18} \cdot 4 \quad \frac{14}{9}$

$\frac{5}{3} + 4A \quad 6 \cdot \frac{5}{7}$

$\frac{45}{5}$

$5\frac{2}{3}A$

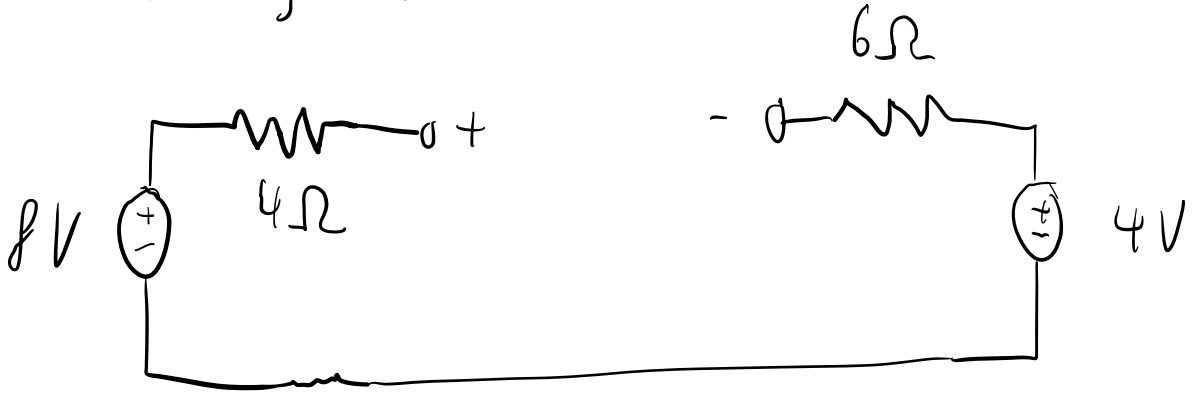
$V_0 = \frac{80}{7} + \frac{14}{9} V \approx 5.8$

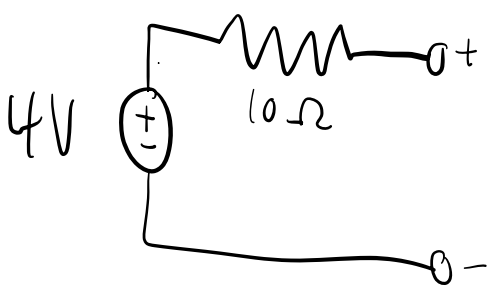


$I_s = \frac{17}{3} A$

(5)

$V_{oc} = \frac{24}{3} = 8V$





$V_0 = 4 \quad I_s = \frac{2}{5} A$