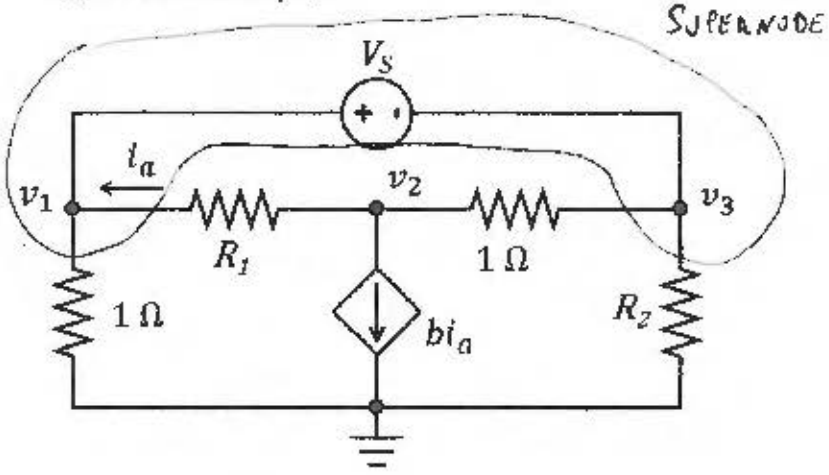
Find the node voltages v_1, v_2 and v_3.
Use nodal analysis.

Vs = 9 V

R1 = 5 Ω

R2 = 5 Ω

b = 3 A/A



OPTION 1

⊛ KCL @ SN: $\frac{v_1}{1} + \frac{v_1 - v_2}{5} + \frac{v_3 - v_2}{1} + \frac{v_3}{5} = 0 \Rightarrow 6v_1 - 6v_2 + 6v_3 = 0$

$\Rightarrow v_1 - v_2 + v_3 = 0$ (1)

⊛ KCL @ 2: $\frac{v_2 - v_1}{5} + \frac{v_2 - v_3}{1} + 3\left(\frac{v_2 - v_1}{5}\right) = 0 \Rightarrow -4v_1 + 9v_2 - 5v_3 = 0$ (2)

⊛ SN: $v_1 = v_3 + 9$ (3)

(3) in (1): $v_3 + 9 - v_2 + v_3 = 0 \Rightarrow -v_2 + 2v_3 = -9$ (4)

(3) in (2): $-4v_3 - 36 + 9v_2 - 5v_3 = 0 \Rightarrow 9v_2 - 9v_3 = 36$

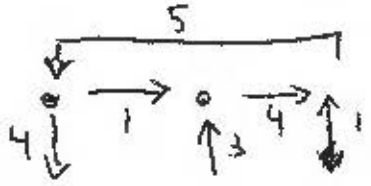
$\Rightarrow v_2 - v_3 = 4$ (5)

(4) + (5): $2v_3 - v_3 = -9 + 4 \Rightarrow \boxed{v_3 = -5V}$

$\boxed{v_1 = 4V}$ FROM (3)

$\boxed{v_2 = -1V}$ FROM (5)

CHECK KCL



AND $v_1 = v_3 + 9$