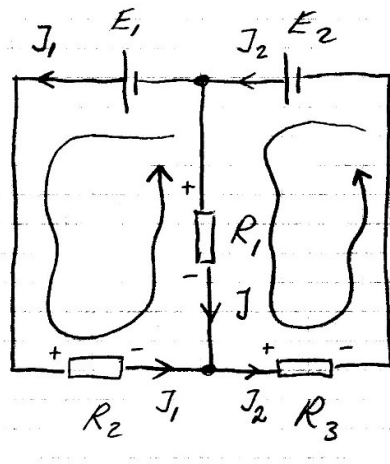


08

SLINGANALYS



$$J = J_2 - J_1 \dots (*)$$

$$+ E_1 - R_2 J_1 + R_1 (J_2 - J_1) = 0 \dots (1)$$

$$+ E_2 - R_1 (J_2 - J_1) - R_3 J_2 = 0 \dots (2)$$

$$+ 4 - 100 J_1 + 10 (J_2 - J_1) = 0 \dots (1)$$

$$+ 2 - 10 (J_2 - J_1) - 25 J_2 = 0 \dots (2)$$

$$110 J_1 - 10 J_2 = 4 \dots (1)$$

$$-10 J_1 + 35 J_2 = 2 \dots (2)$$

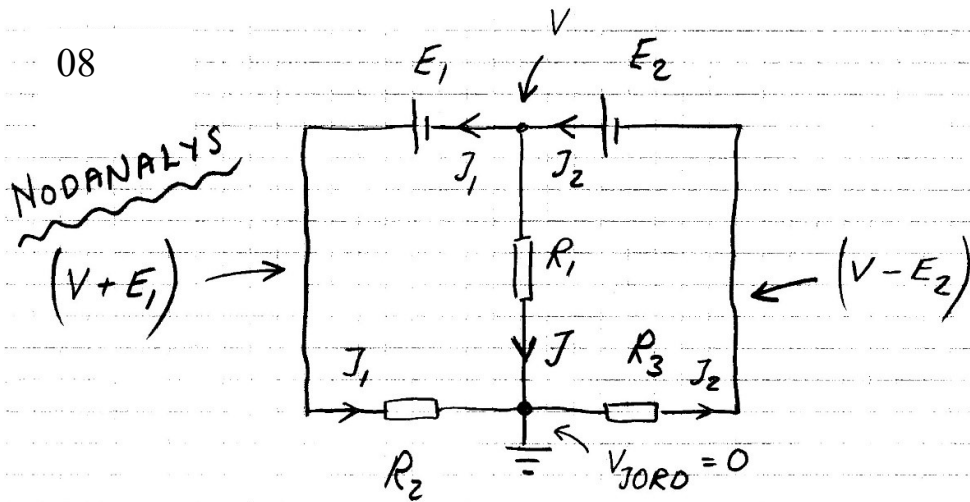
$$\begin{pmatrix} 110 & -10 \\ -10 & 35 \end{pmatrix} \begin{pmatrix} J_1 \\ J_2 \end{pmatrix} \sim \begin{pmatrix} 4 \\ 2 \end{pmatrix} \sim \left\{ 11 \times \text{EKV}(2) + \text{EKV}(1) \right\} \sim$$

$$\sim \begin{pmatrix} 110 & -10 \\ 0 & 375 \end{pmatrix} \begin{pmatrix} J_1 \\ J_2 \end{pmatrix} \Rightarrow J_2 = \frac{26}{375} \approx 69,3 \text{ mA}$$

$$(1) \Rightarrow 110 J_1 - 10 \cdot 69,3 \cdot 10^{-3} = 4 \Rightarrow J_1 = 42,7 \text{ mA}$$

$$(*) \Rightarrow \underline{\underline{J = 69,3 - 42,7 \text{ mA} \approx 27 \text{ mA}}}$$

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$$J_2 = J_1 + J \Rightarrow J_2 - J_1 - J = 0 \Rightarrow$$

$$\frac{V_{JORD} - (V - E_2)}{R_3} - \frac{(V + E_1) - V_{JORD}}{R_2} - \frac{V - V_{JORD}}{R_1} = 0$$

$$\Rightarrow \frac{0 - (V - 2)}{25} - \frac{(V + 4) - 0}{100} - \frac{V - 0}{10} = 0$$

$$\Rightarrow -\frac{V}{25} + \frac{2}{25} - \frac{V}{100} - \frac{4}{100} - \frac{V}{10} = 0$$

$$\Rightarrow V \approx +0,27 \text{ V}$$

$$J = \frac{V - V_{JORD}}{R_1} \Rightarrow J \approx \frac{0,27 - 0}{10} =$$

$$= 27 \text{ mA}$$