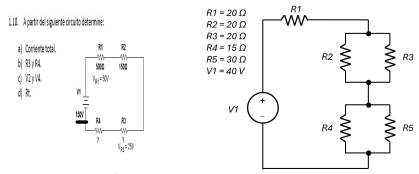
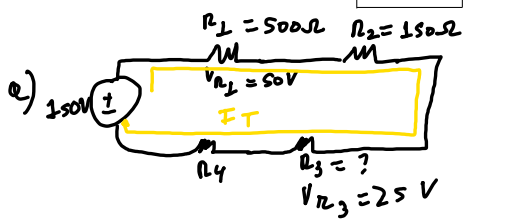




a) I_T → V = I R

$V_{R_1} = I_T \times R_1$

$50V = I_T \times 500\Omega$

$\frac{50V}{500\Omega} = I_T$

$\frac{1}{10} = I_T$

$\boxed{I_T = 0,1A}$

$V_{R_3} = I_T \times R_3$

$25V = 0,1A \times R_3$

$\frac{25V}{0,1A} = R_3$

$250\Omega = R_3$

$R_T = (R_1 + R_2 + R_3 + R_4)$

$= (500\Omega + 150\Omega + 250\Omega + R_4)$

$= 900 + R_4$

$R_T = \frac{V_T}{I_T}$

$900 + R_4 = \frac{150V}{0,1A}$

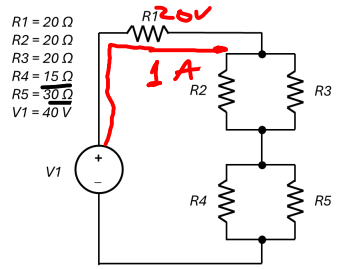
$900 + R_4 = 1500$

$R_4 = 1500 - 900$

$R_4 = 600$

$R_T = 900 + 600 = \boxed{1500}$

$I_T = \frac{V_1}{R_T} = \frac{150V}{150\Omega} = \frac{15}{150} = \boxed{0,1A}$



a) R_{Eq} ✓

b) I_T ✓

c) V_{R_1}

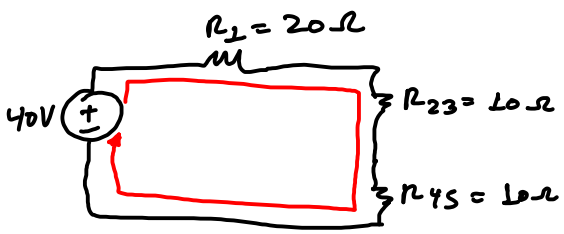
d) V_{R_2} ; I_{R_2}

$R2 // R3 = R_{23} = \frac{1}{20} + \frac{1}{20} = \frac{2}{20} = \frac{1}{10}$

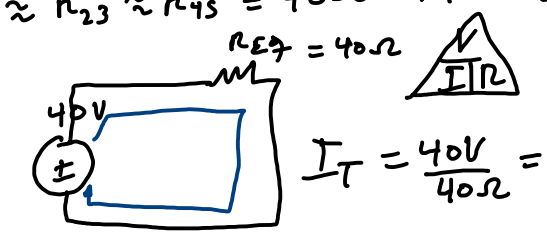
$\left(\frac{1}{10}\right)^{-1} = R_{23} = \boxed{10\Omega}$

$R_4 // R_5 = \frac{1 \cdot 2}{15 \cdot 2} + \frac{1}{30} = \frac{2}{30} + \frac{1}{30} = \frac{3}{30} = \frac{1}{10}$

$\left(\frac{1}{10}\right)^{-1} = R_{45} = 10\Omega$

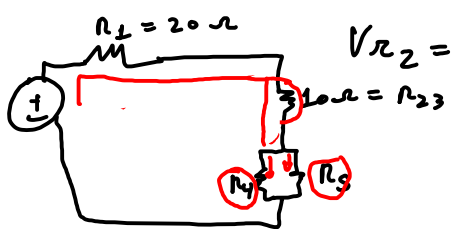


$R_1 \approx R_{23} \approx R_{45} = 40\Omega = R_T = R_{Eq}$



$I_T = \frac{40V}{40\Omega} = 1A$

$V_{R_1} = I_T \times R_1 = 1A \times 20\Omega = \underline{20V}$



$V_{R_2} = I_T \times R_{23}$

$V_{R_2} = 1A \times 10\Omega = 10V$

$I_{R_2} = \frac{V_{R_2}}{R_2} = \frac{10V}{20\Omega} = \boxed{0,5A}$