1 1

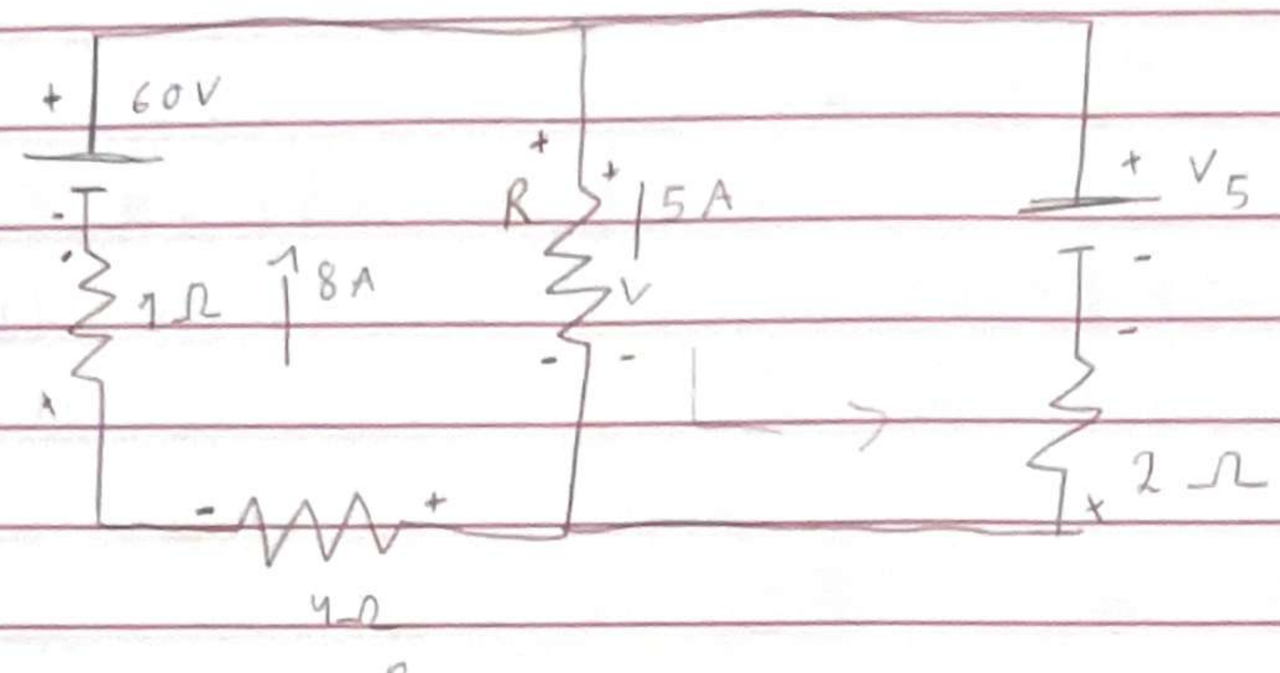
6- $30 + i \cdot R1 + i \cdot R2 - 40 + i \cdot R3 = 0$

$i \cdot (R1 + R2) + i \cdot R3 = 10$

$R3 = (10 - i(R1 + R2)) / i = (10 - 4 \cdot (1,5)) / 4 =$

$4/4 = 1\,\Omega$

7-



$+8.1 - 60 + 8R + 8.4 = 0$

$8 - 60 + 8R + 32 = 0$

$-20 + 8R = 0$

$8R = 20$

$R = \frac{20}{8}$

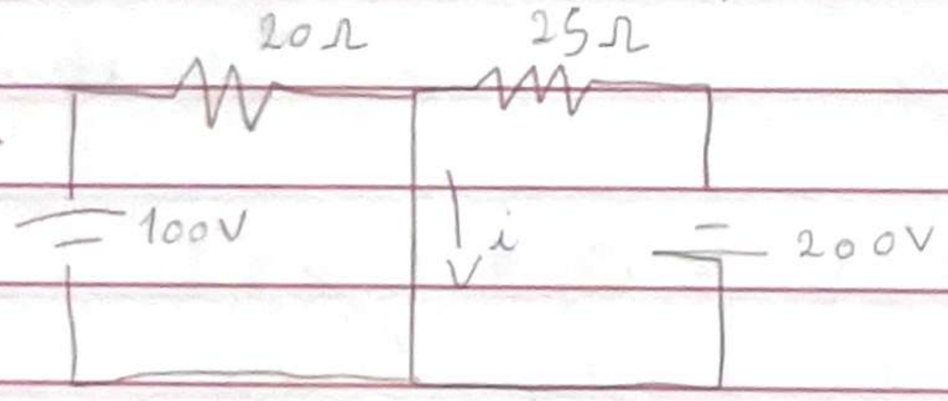
$R = 2,5\ \Omega$

$+2,5.5 + 2.5 - V_5 = 0$

$+12,5 + 10 - V_5 = 0$

$V_5 = 22,5$

8-



$20 \cdot i - 100$

$i = \frac{100}{20}$

$i_1 = 5\ A$

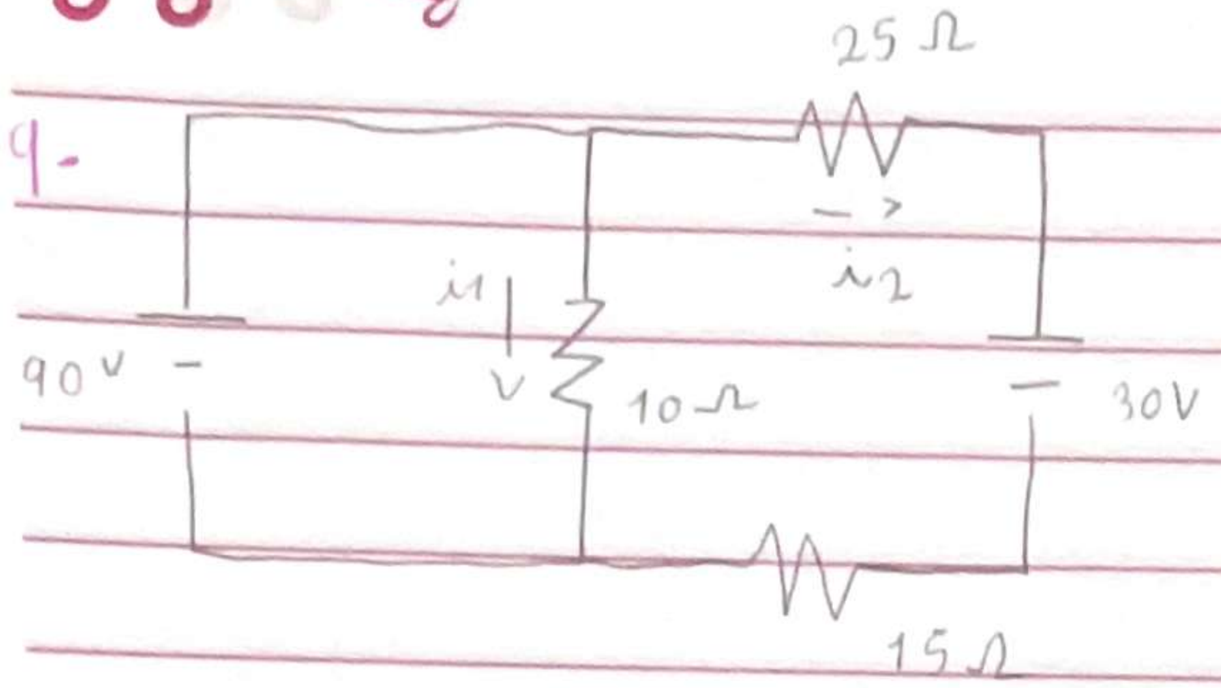
$25 \cdot i - 200$

$i = \frac{200}{25}$

$i_2 = 8\ A$

$i_3 = 5 - 8 = -3\ A$

9-



$+10.i - 90$

$i = \frac{90}{10}$

$i_1 = 9\ A$

$+25.i + 15.i + 30v - 90v$

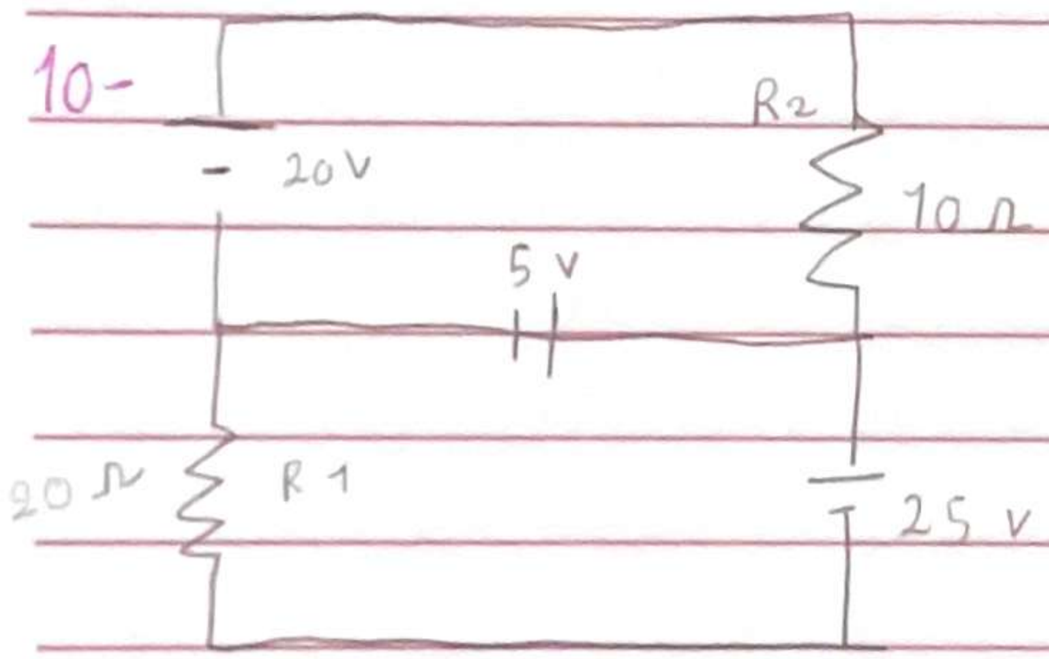
$i = -60$

40

$i_2 = -1,5\ A$

$i_3 = 9 - 1,5 = 7,5\ A$

10-



$P = 10.10^3 \ (1,5.10^{-3})^2$

$P = 10.10^3 . 2,25 . 10^{-6}$

$P = 22,5 . 10^{-3}$

$P = 22,5\ mW$

$P_2 = 20 . 10^3 . 1 . 10^{-6}$

$P_2 = 20\ mW$

$-20.10.5\ 0$

$-5 + 25 + 20\ 0$

$-15 + 10.L_1 = 0$

$10L_1 = 0$

$30 + 20_L = 0$

20.20

$i_2 = 1\ mA$