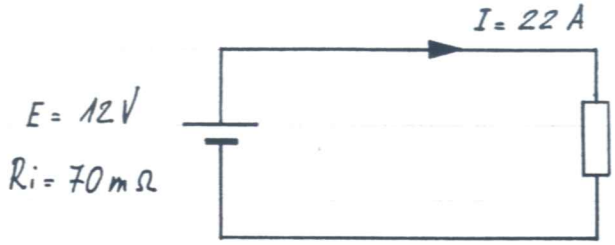
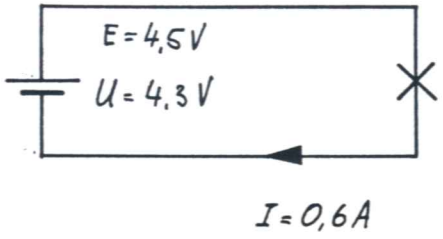
№6.1



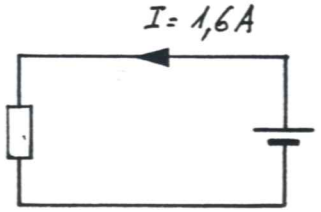
$$U = E - (R_i \cdot I) = 12 - (0{,}07 \cdot 22) = \underline{10{,}46\ V}$$

№6.2



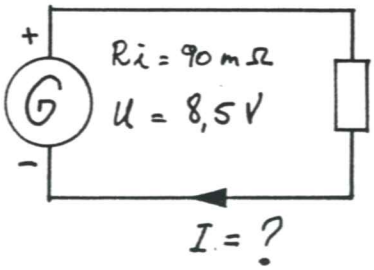
$$U = E - (R_i \cdot I) \Rightarrow R_i = \frac{E - U}{I} = \frac{4{,}5 - 4{,}3}{0{,}6} = \underline{0{,}33\ \Omega}$$

№6.3



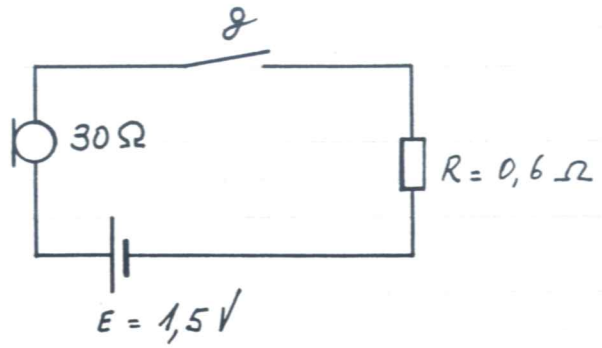
$$U = E - (R_i \cdot I) \Rightarrow R_i = \frac{E - U}{I} = \frac{24 - 23{,}56}{1{,}6} = \underline{0{,}275\ \Omega}$$

№6.4



$$U_{ch} = R_i \cdot I \Rightarrow I = \frac{U_{ch}}{R_i} = \frac{8{,}5}{0{,}09} = \underline{94{,}4\ A}$$

№ 6.5

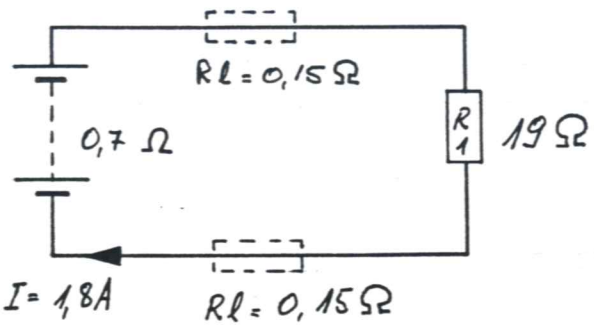


$I = ?$

$Rt = R + R = 30 + 0,6 = 30,6\ \Omega$

$I = \frac{U}{R} = \frac{1,5}{30,6} = \underline{\underline{49\ mA}}$

№6.6



$U\ ch. = R_i \cdot I = 0,7 \cdot 1,8 = 1,26\ V$

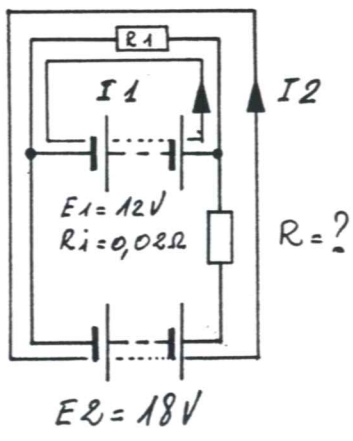
$U\ R_1 = R_1 \cdot I = 19 \cdot 1.8 = \underline{\underline{34,2\ V}}$

$U\ ch.\ lignes : Rl \cdot I \cdot 2 = 0,15 \cdot 1,8 \cdot 2 = 0,54\ V$

$U\ battr. = U_{R_1} + U\ ch.lignes = 34,2 + 0,54 = \underline{\underline{34,74\ V}}$

$E = U + U\ ch. = 34,74 + 1,26 = \underline{\underline{36\ V}}$

№6.7



$I\ R1 = 16\ A$

$I_1 = I_2 = \frac{16}{2} = 8\ A$

$U\ bHr.\ 1 = E - (R_i \cdot I) = 12 - (0,02 \cdot 8) = 11,84\ V$

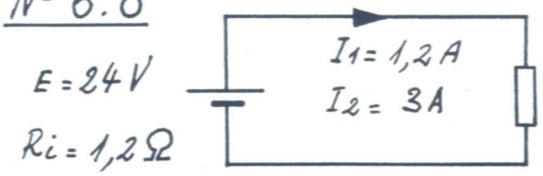
$U\ bHr.\ 2 = E - (R_i \cdot I) = 18 - (0,03 \cdot 8) = 17,76\ V$

$R_1 = \frac{U}{I} = \frac{11,84}{8} = 1,48\ \Omega$

$Rt = \frac{U}{I} = \frac{17,76}{8} = 2,22\ \Omega$

$R = Rt - R_1 = 2,22 - 1,48 = \underline{\underline{0,74\ \Omega}}$

№ 6.8



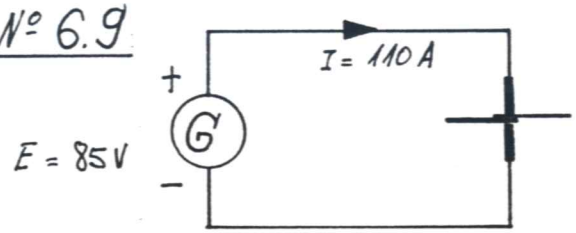
$\Delta U = ?$

$$U_1 = E - (R_i \cdot I) = 24 - (1{,}2 \cdot 1{,}2) = 22{,}56\ V$$

$$U_2 = E - (R_i \cdot I) = 24 - (3 \cdot 1{,}2) = 20{,}4\ V$$

$$\Delta U = U_1 - U_2 = 22{,}56 - 20{,}4 = \underline{\underline{2{,}16\ V}}$$

№ 6.9

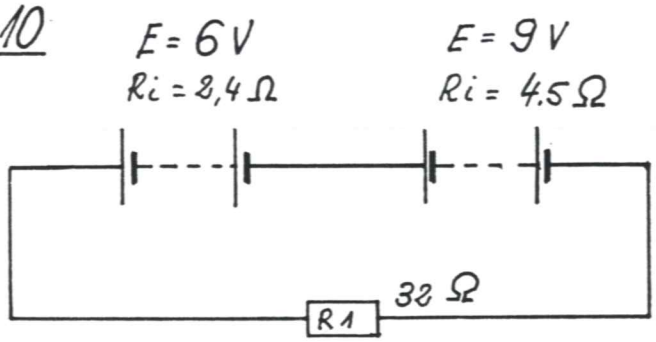


$R = ?$

$$U = E - 26\% = 85 - 26\% = 62{,}9\ V$$

$$R = \frac{U}{I} = \frac{62.9}{110} = \underline{\underline{0{,}5718\ \Omega}}$$

№ 6.10



$I = ?$

$U_1 = ?$

$U_2 = ?$

$U_{R1} = ?$

$$Rt = R_1 + R_i + R_i = 32 + 2{,}4 + 4{,}5 = 38{,}9\ \Omega$$

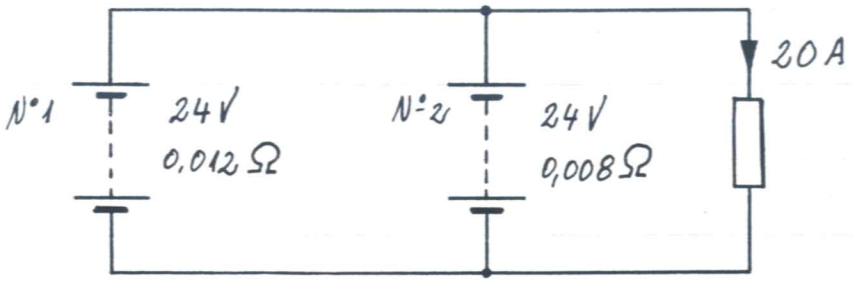
$$I = \frac{E_1 + E_2}{Rt} = \frac{6 + 9}{38{,}9} = \underline{\underline{0{,}385\ A}}$$

$$U_1 = E_1 - (R_i \cdot I) = 6 - (2{,}4 \cdot 0{,}385) = \underline{\underline{5{,}076\ V}}$$

$$U_2 = E_2 - (R_i \cdot I) = 9 - (4.5 \cdot 0{,}385) = \underline{\underline{7{,}268\ V}}$$

$$U_{R_1} = R_1 \cdot I = 32 \cdot 0{,}385 = \underline{\underline{12{,}34\ V}} = U_1 + U_2\ !$$

№ 6.11



$I_1 = ?$

$I_2 = ?$

$U_1 = ?$

$U_2 = ?$

$U_1 = U_2$

I est inversement proportionnel à Ri

plus Ri est grand plus I est petit!

donc $I_1 = 8/20$ et $I_2 = 12/20$

d'où $I_1 = \underline{\underline{8\ A}}$

$I_2 = \underline{\underline{12\ A}}$

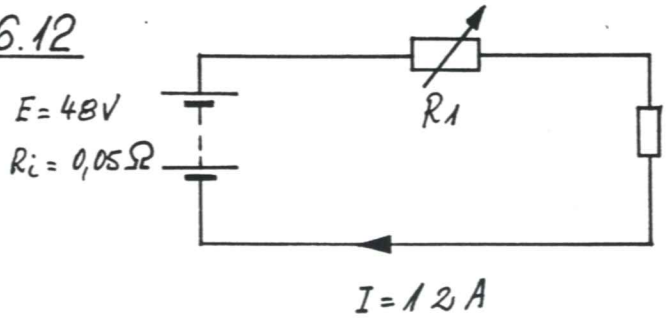
$U_{ch.1} = R_i \cdot I = 0{,}012 \cdot 8 = 0{,}096\ V$

$U_{ch.2} = R_i \cdot I = 0{,}008 \cdot 12 = 0{,}096\ V$

$U_1 = U_2 = E - (R_i \cdot I) = 24 - (0{,}012 \cdot 8) = \underline{\underline{23{,}904\ V}}$

ou $= 24 - (0{,}008 \cdot 12) = \underline{\underline{23{,}904\ V}}$

№ 6.12



$R_1 = ?$

$U_{ch.} = R_i \cdot I = 0{,}05 \cdot 12 = 0{,}6\ V$

$U_{R_1} = E - (U + U_{ch}) = 48 - (42 + 0{,}6) = 5{,}4\ V$

$R_1 = \frac{U}{I} = \frac{5{,}4}{12} = \underline{\underline{0{,}45\ \Omega}}$
