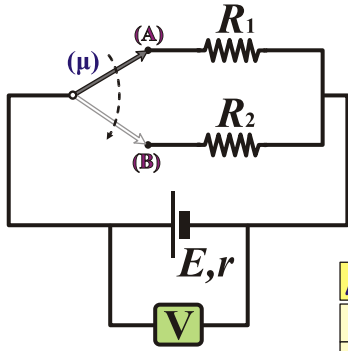


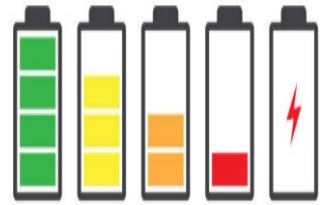
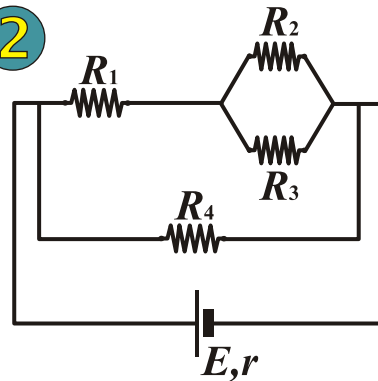


1

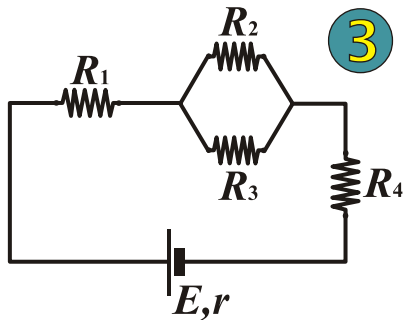
$$\begin{aligned} R_1 &= 4 \, \Omega \\ R_2 &= 1 \, \Omega \\ E &= ? \\ r &= ? \end{aligned}$$

μεταγωγός	βολτόμετρο
στο (Α)	$V_V = 8 \text{ Volt}$
στο (Β)	$V'_V = 5 \text{ Volt}$

2



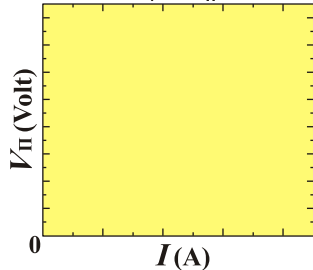
$$\begin{aligned} R_1 &= R_2 = R_3 = 4 \, \Omega \\ R_4 &= 3 \, \Omega \\ E &= 9 \text{ V} \\ r &= 1 \, \Omega \end{aligned}$$



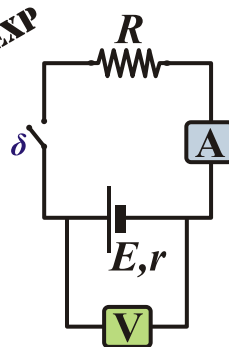
3

$$\begin{aligned} R_1 &= R_4 = 4 \, \Omega \quad r = 3 \, \Omega \\ R_2 &= R_3 = 8 \, \Omega \quad V_{R1} = 4 \text{ V} \end{aligned}$$

...να συμπληρωθεί:



4 EXP

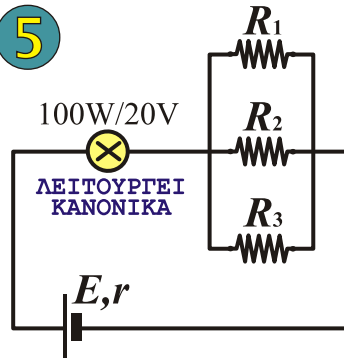


$$\begin{aligned} P_{\eta\lambda.} &= ? & P_{\alpha\pi\omega\lambda.} &= ? \\ P_{\epsilon\zeta\omega\tau.} &= ? & \alpha_{\pi\eta\gamma\gamma\iota\varsigma} &= ? \end{aligned}$$

$$\begin{aligned} E &= ? \\ r &= ? \end{aligned}$$

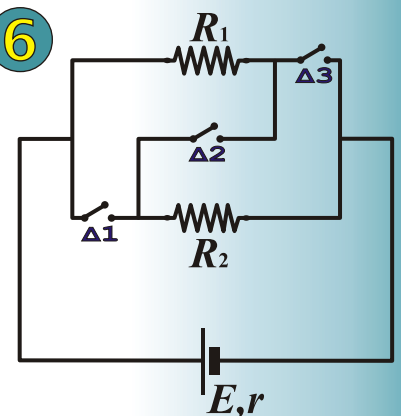
διακόπτης	ΒΟΛΤΟΜΕΤΡΟ V (Volt)	ΑΜΠΕΡΟΜΕΤΡΟ I (A)
ΑΝΟΙΚΤΟΣ		
ΚΛΕΙΣΤΟΣ		

5



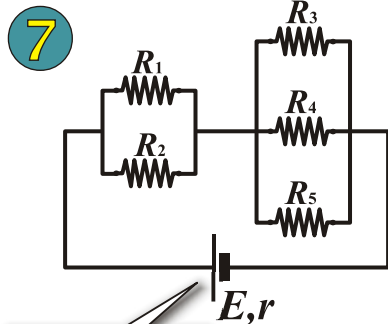
$$\begin{aligned} R_1 &= 2 \, \Omega \\ R_2 &= 3 \, \Omega \\ R_3 &= 6 \, \Omega \\ E &= 50 \text{ V} \\ r &= ? \\ V_{\Pi} &= ? \\ P_{R1} &= ? \end{aligned}$$

6

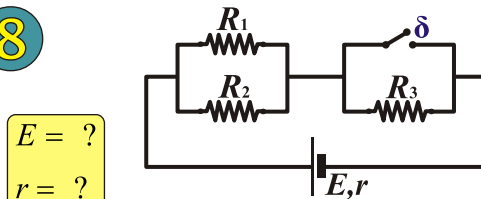


Δ1	Δ2	Δ3	V_{Π} (Volt)
Α	Κ	Α	90
Κ	Α	Κ	200/3

$$\begin{aligned} R_1 &= 3 \, \Omega & E &= ? \\ R_2 &= 6 \, \Omega & r &= ? \end{aligned}$$

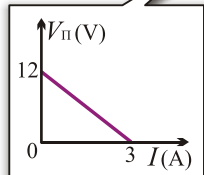


8



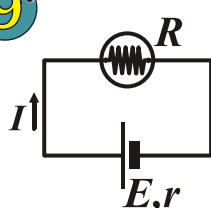
$$\begin{aligned} E &= ? \\ r &= ? \end{aligned}$$

$$\begin{aligned} R_1 &= R_3 = 1 \, \Omega & V_{\Pi} (\delta : \alpha\upsilon.) &= 10,8 \text{ V} \\ R_2 &= 4 \, \Omega & V_{\Pi} (\delta : \kappa\lambda.) &= 9,6 \text{ V} \end{aligned}$$



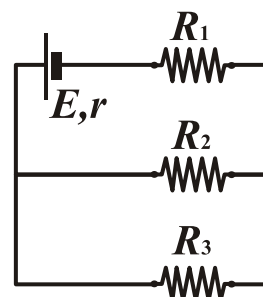
$$\begin{aligned} R_1 &= 3 \, \Omega \\ R_2 &= 6 \, \Omega \\ R_3 &= R_4 = R_5 = 18 \, \Omega \\ V_{\Pi} &= ? \end{aligned}$$

9



$$\begin{aligned} E &= 3\sqrt{5} \text{ V} & P_R &= 10 \text{ W} \\ r &= 1 \, \Omega & R &= ? \end{aligned}$$

10



$$\begin{aligned} R_1 &= 5 \, \Omega & E &= ? \\ R_2 &= 12 \, \Omega & I_{R1} &= ? \\ R_3 &= 4 \, \Omega & P_{R2} &= ? \\ V_{\Pi} &= 32 \text{ V} & P_{\alpha\pi\omega\lambda.} &= ? \\ r &= 2 \, \Omega & Q_{R3} &= ? \\ & & [t=2 \text{ s}] & \end{aligned}$$

11

$$R_1 = 6\Omega$$

$$R_2 = 12\Omega$$

$$r = 2\Omega$$

$$E = 24\text{ Volt}$$

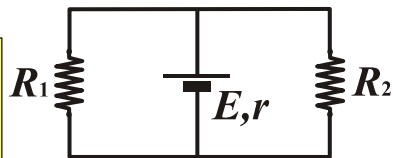
$$I = ?$$

$$V_{\Pi} = ?$$

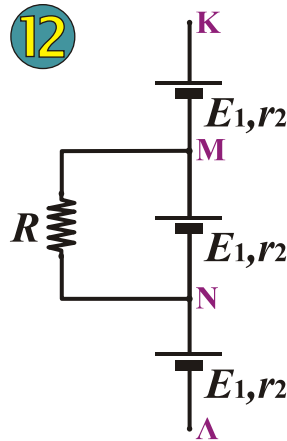
$$P_1 = ?$$

$$P_2 = ?$$

$$Q_{\text{ολ.}} = ? (t = 20\text{ sec})$$



12



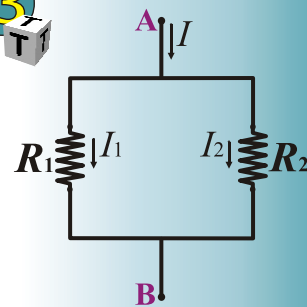
$$E_1 = E_2 = E_3 = 10\text{ Volt}$$

$$r_1 = r_2 = r_3 = 3\Omega$$

$$R = 7\Omega$$

$$P_R = ?, V_{\text{ΚΛ}} = ?$$

13

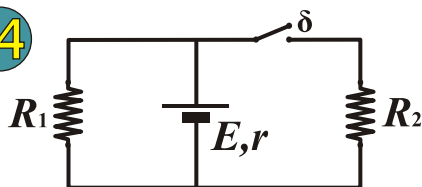


$$\text{A. } I_1 = \frac{R_1 + R_2}{R_1 R_2} I$$

$$\text{B. } I_1 = \frac{R_2}{R_1 + R_2} I$$

$$\text{Γ. } I_1 = \frac{R_1 + R_2}{R_1} I$$

14



$$E = 64\text{ Volt}$$

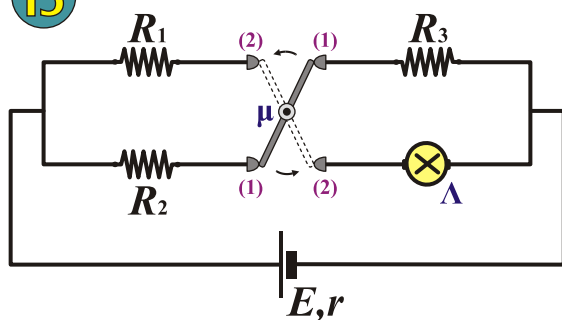
$$r = 2\Omega$$

$$R_1 = 6\Omega$$

$$R_2 = 3\Omega$$

$$P_{R1(\delta \text{ αν.})} / P_{R1(\delta \text{ κλ.})} = ?$$

15



$$E = 12\text{ Volt}$$

$$R_2 = 15\Omega$$

$$R_3 = 6\Omega$$

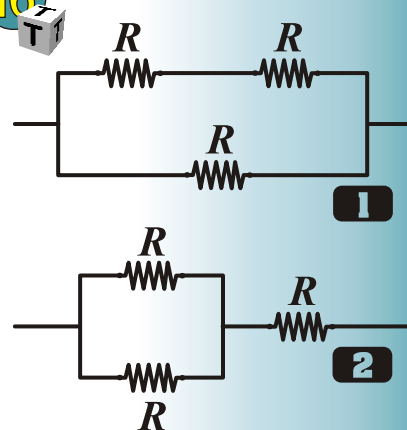
$$\Lambda: 6\text{ V} / 6\text{ W}$$

$$\mu \rightarrow (1): V_{\Pi} = 10,5\text{ Volt}$$

$$\mu \rightarrow (2): \Lambda: \text{Λειτ. Καν.}$$

$$R_1 = ?$$

16

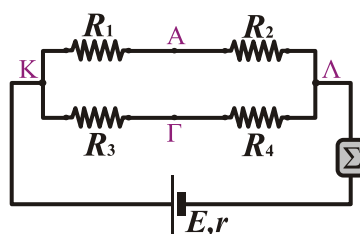


Τα κυκλώματα (1) & (2) συνδέονται στην ίδια πηγή E , $r=0$. Στο κύκλωμα (1) η πηγή διαρρέεται από ρεύμα I_1 και στο κύκλωμα (2) από ρεύμα I_2 .

$$\text{A. } I_1 = \frac{9}{4} I_2 \quad \text{B. } I_1 = \frac{3}{2} I_2$$

$$\text{Γ. } I_1 = \frac{2}{3} I_2$$

17



$$E = 24\text{ Volt}$$

$$R_1 = R_4 = 10\Omega$$

$$R_2 = R_3 = 5\Omega$$

$$\Sigma: 5\text{ V} / 10\text{ W}$$

$$R_{\Sigma} = ?, R_{\text{εξ.}} = ?$$

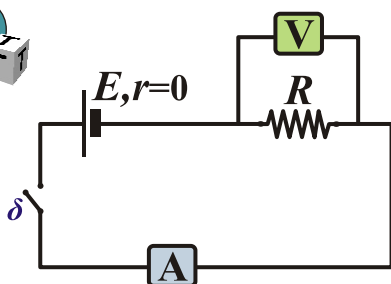
$$P_{\eta\lambda.} = ?, r = ?$$

$$I_1 = ?, I_3 = ?$$

$$V_A - V_{\Gamma} = ?$$

H συσκευή (Σ) λειτουργεί κανονικά

18



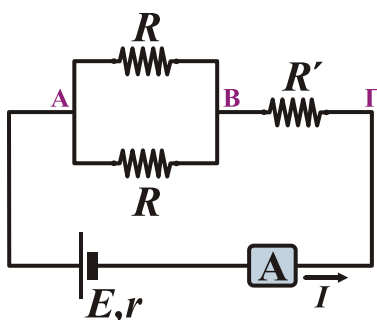
Όταν κλείσουμε τον διακόπτη και αυξήσουμε την ΗΕΔ E , οι ενδείξεις του αμπερομέτρου και του βολτομέτρου:

$$\text{A. } V: \downarrow, A: \downarrow$$

$$\text{B. } V: -, A: \uparrow$$

$$\text{Γ. } V: \uparrow, A: \uparrow$$

20



$$E = 3,1\text{ Volt}$$

$$r = 0,5\Omega$$

$$I = 0,2\text{ A}$$

$$V_{\Pi} = ?$$

$$R_{\text{εξ.}} = ?$$

$$I_{1,2,3} = ?$$

$$V_{\text{ΒΓ}} = 2V_{\text{ΑΒ}}$$

$$R = ?, R' = ?$$

19

Δύο πηγές (1) & (2).

$$\text{A. } r_1 = \frac{r_2}{4}$$

$$\text{B. } r_1 = \frac{r_2}{3}$$

$$\text{Γ. } r_1 = \frac{r_2}{2}$$

