

No 20 011 901

Sonuç 1

$$R_1 = 1 \Omega$$

$$R_2 = 0.5 \Omega$$

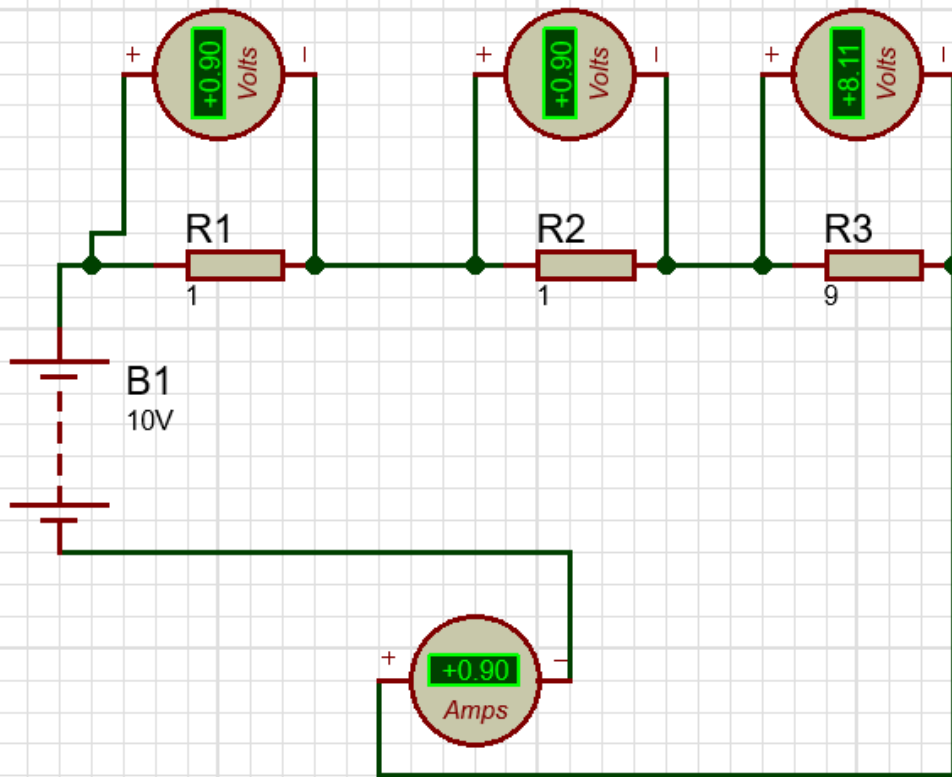
$$R_3 = 9 \Omega$$

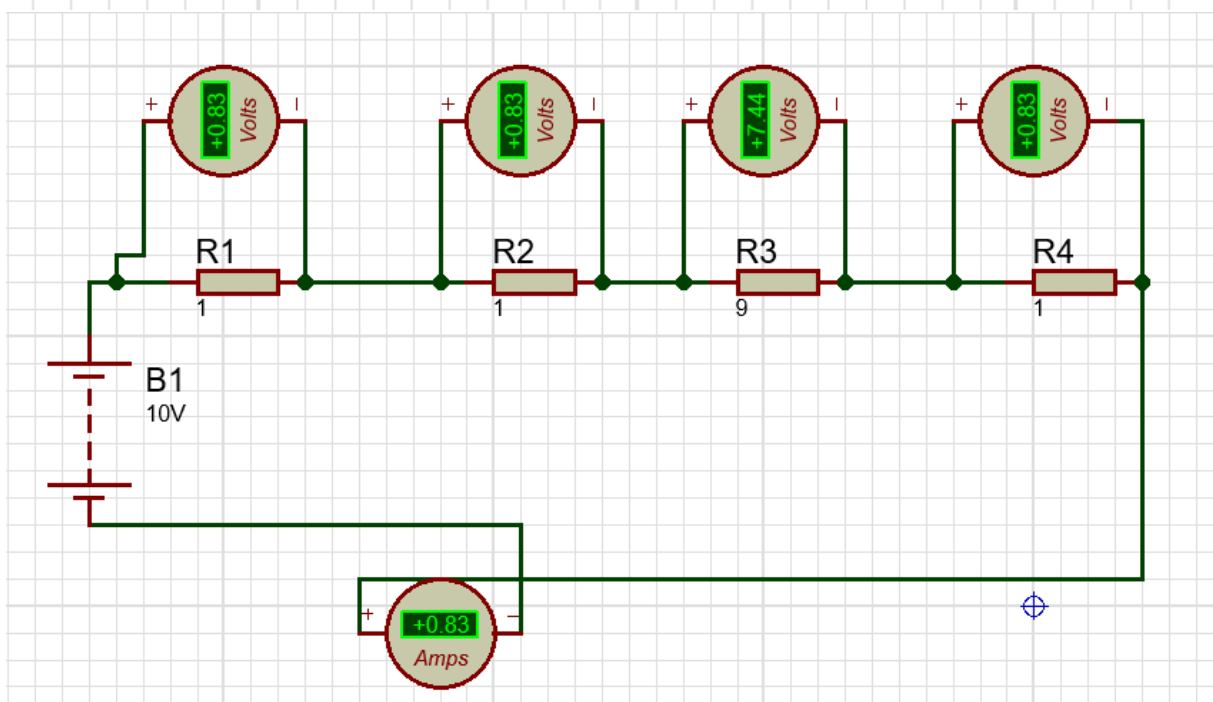
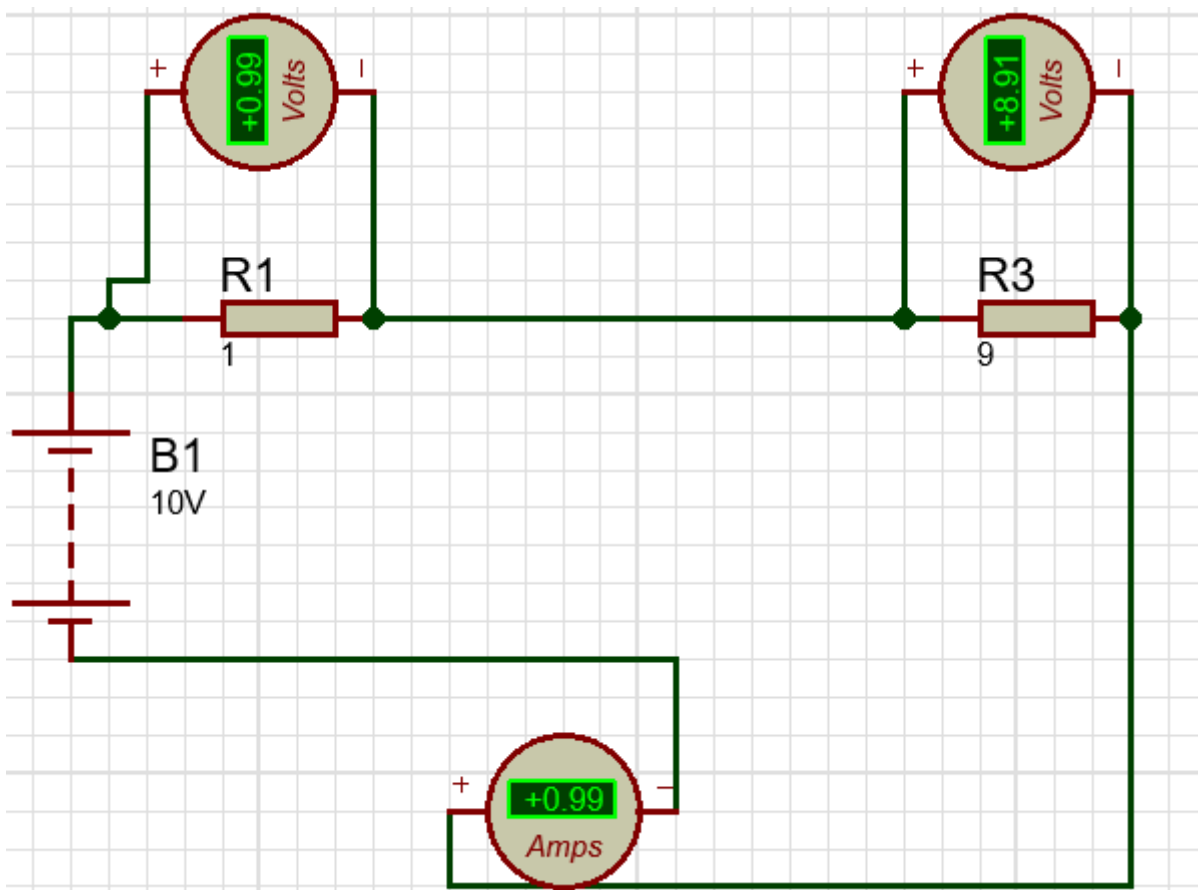
$$R_4 = 0.5 \Omega$$

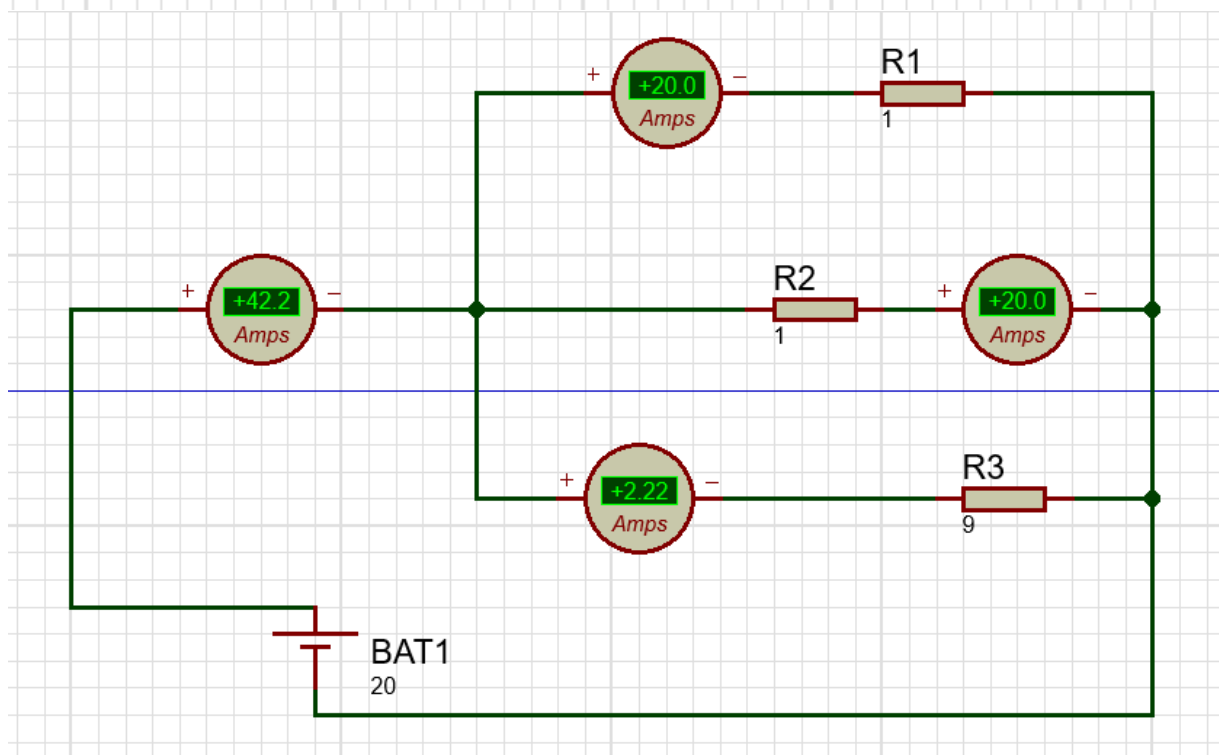
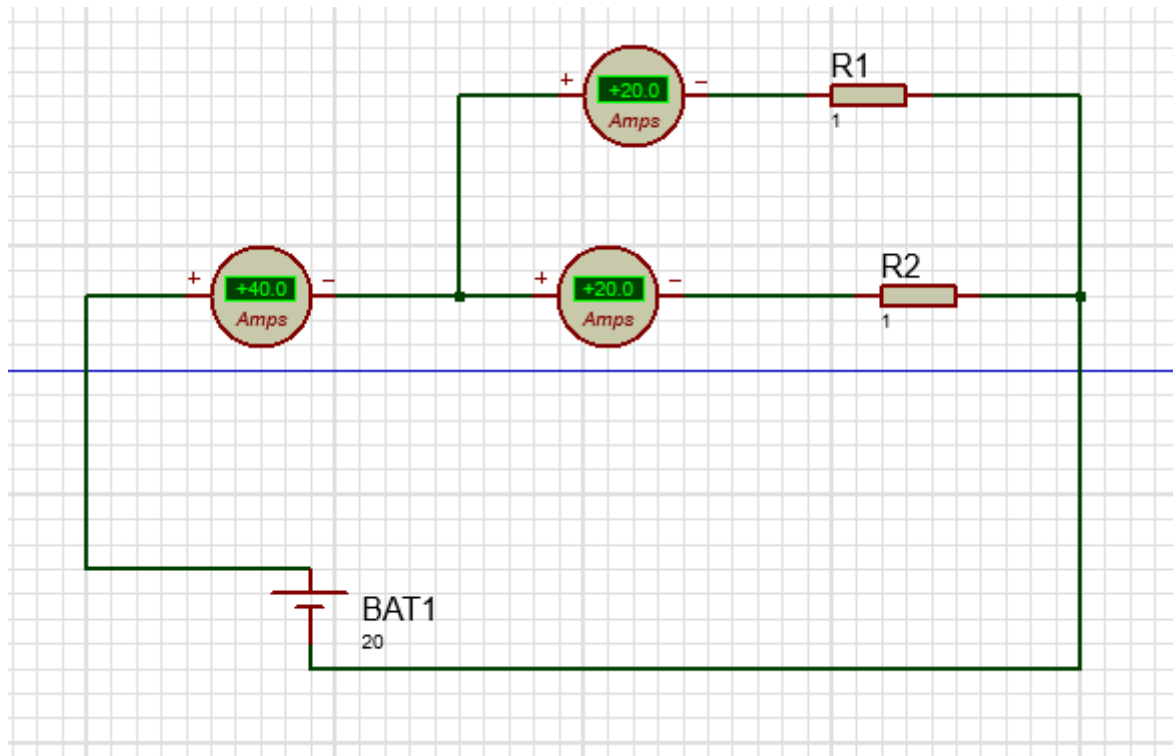
Durumlar	Seri	V	V <sub>1</sub>	V <sub>2</sub>	V <sub>3</sub>	V <sub>4</sub>	I <sub>ö</sub>	I <sub>h</sub>	R <sub>es</sub> h	P <sub>w</sub> (V <sub>h</sub> · I <sub>h</sub> )
R <sub>4</sub> çıkıyor	R <sub>1</sub> , R <sub>2</sub> , R <sub>3</sub>	10	0,9 V	0,9 V	8,1 V	—	0,9 A	0,91 A	11 Ω	9,1 W
R <sub>2</sub> R <sub>4</sub> çıkıyor	R <sub>1</sub> , R <sub>3</sub>	10	0,99 V	—	8,99 V	—	0,99 A	1 A	10 Ω	10 W
—	R <sub>1</sub> , R <sub>2</sub> , R <sub>3</sub> , R <sub>4</sub>	10	0,83 V	0,83 V	7,44 V	0,83 V	0,83 A	0,833 A	12 Ω	8,33 W

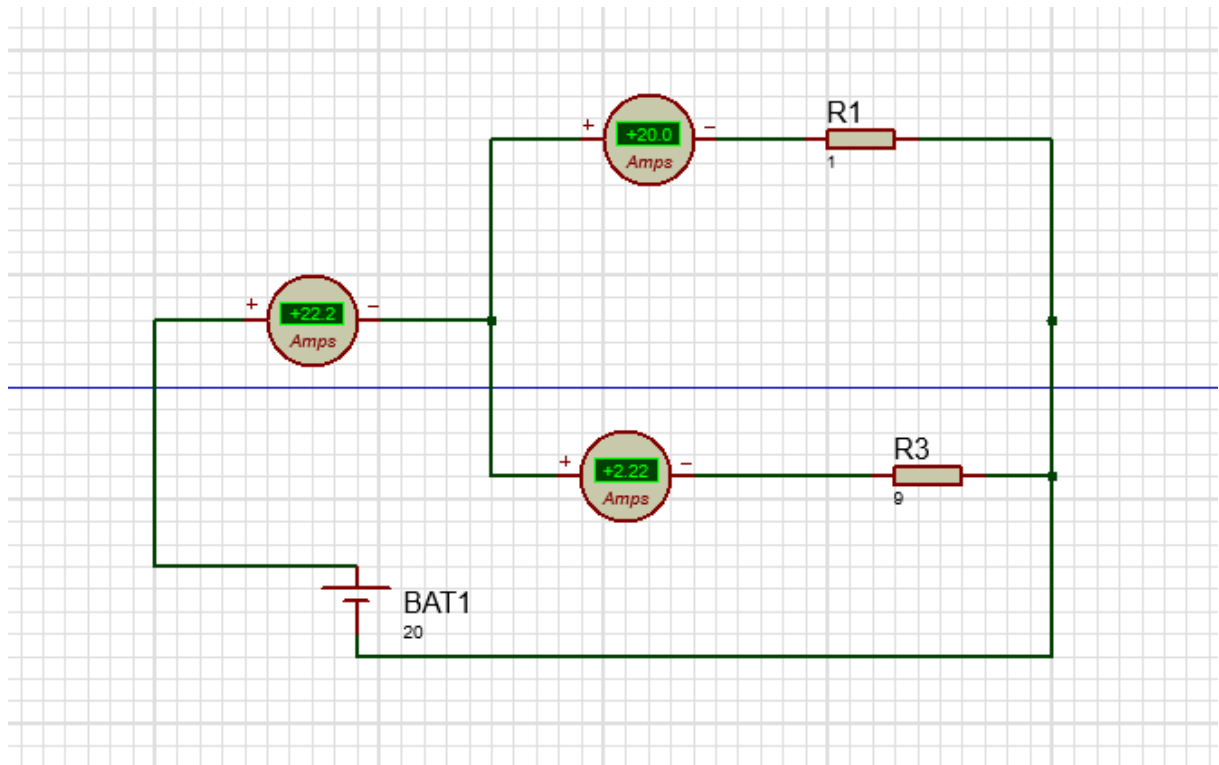
$$V = I \cdot R_{es} \quad 10 = I \cdot (9 + 1 + 1 + 1) \quad P = V \cdot I = 10 \cdot 0,833 = 8,33 \text{ W}$$

$$R_{es} = 9 + 1 + 1 + 1 \quad \frac{10}{12} = 0,833 \text{ A}$$









$$V = I \cdot R_{eq} \quad 10 = I \cdot (1+9) \quad P = I \cdot V = 1 \cdot 10 = 10 \text{ W}$$

$$R_{eq} = 1+9$$

$$I = 1 \text{ A}$$

$$V = I \cdot R_{eq}$$

$$10 = I \cdot 11$$

$$P = I \cdot V = 0,91 \cdot 10 = 9,1 \text{ W}$$

$$R_{eq} = 9+1 = 10 \Omega$$

$$I = 0,91$$

Sen U 2

$$R_1 = 1 \Omega$$

$$R_2 = 1 \Omega$$

$$R_3 = 9 \Omega$$

Durum	Paralel	V	$I_1$	$I_2$	$I_3$	$I_0$	$I_1$	$R_{eq}$	P
$R_3$ 9,42A	$R_1, R_2$	20	14,7 A	14,7 A	—	29,4 A	40 A	0,9 Ω	800 W
$R_2$ 9,42A	$R_1, R_3$	20	18 A	—	2 A	20 A	22,22 A	0,9 Ω	444,44 W
—	$R_1, R_2, R_3$	20	14,5 A	14,5 A	11,23 A	34,7 A	42,22 A	0,43 Ω	844,4 W

$$V = I \cdot R_{eq}$$

$$20 = I \cdot \frac{9}{19}$$

$$R_{eq} = 0,473 \Omega$$

$$R_{eq} = \frac{1}{\frac{1}{1} + \frac{1}{1} + \frac{1}{9}} = \frac{9}{19}$$

$$I = 42,22 \text{ A}$$

$$P = 42,22 \cdot 20 = 844,4 \text{ W}$$

$$V = I \cdot R_{eq}$$

$$20 = I \cdot \frac{9}{10}$$

$$R_{eq} = 0,9 \Omega$$

$$R_{eq} = \frac{1}{\frac{1}{1} + \frac{1}{9}} = \frac{9}{10}$$

$$I = 22,22 \text{ A}$$

$$P = 22,22 \cdot 20 = 444,4 \text{ W}$$

$$V = I \cdot R_{eq}$$

$$20 = I \cdot R$$

$$P = I \cdot V = 40 \cdot 20 = 800 \text{ W}$$

$$I = 40 \text{ A}$$

$$R_{eq} = \frac{1}{\frac{1}{1} + \frac{1}{1}} = \frac{1}{2}$$