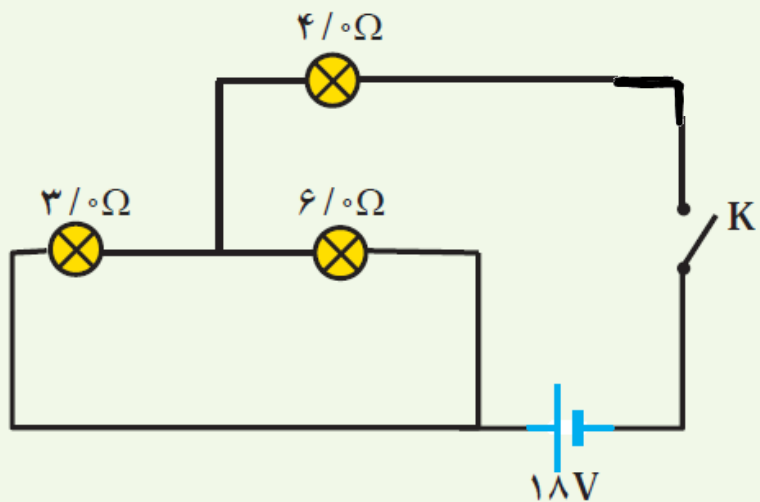
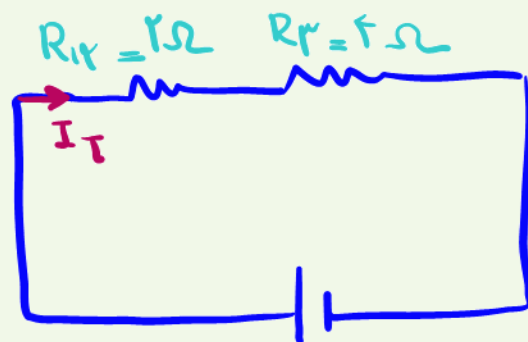




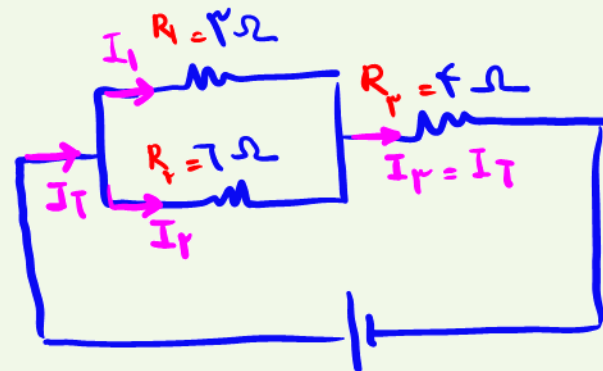
۳۰ در شکل زیر، وقتی کلید بسته شود چه جریانی از هر لامپ رشته‌ای می‌گذرد؟



$$I_T = I_{12} = I_2 = 2A$$

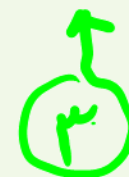
$$V_{12} = I_{12} R_{12} = 2 \times 2 = 4V$$

$$V_1 = V_2 = 4V$$



$$I_1 = \frac{V_1}{R_1} = \frac{4}{3} = 1.33A$$

$$I_2 = \frac{V_2}{R_2} = \frac{4}{4} = 1A$$



$$\frac{1}{R_{12}} = \frac{1}{3} + \frac{1}{6} = \frac{1}{2} \Rightarrow R_{12} = 2\Omega$$

$$R_T = 2 + 4 = 6\Omega$$

$$I_T = \frac{V}{R_T} = \frac{18}{6} = 3A$$

