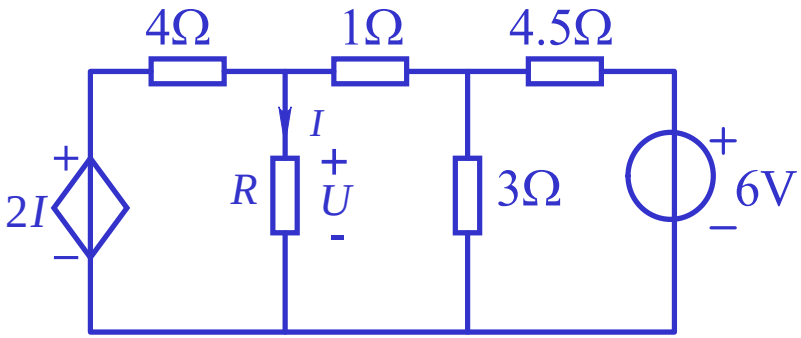
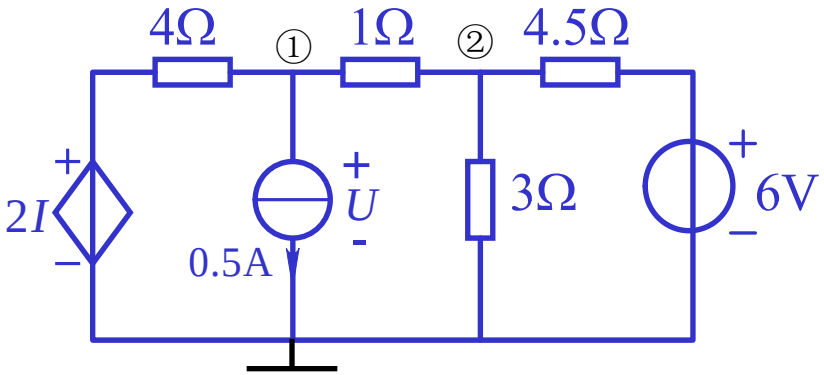
置换定理

例3 已知I=0.5A，求电阻R。

解





$$\begin{cases} \left(\dfrac{1}{4\Omega}+\dfrac{1}{1\Omega}\right)U_{n1}-\dfrac{1}{1\Omega}U_{n2}=\dfrac{2I}{4\Omega}-0.5\text{A} \\ -\dfrac{1}{1\Omega}U_{n1}+\left(\dfrac{1}{1\Omega}+\dfrac{1}{3\Omega}+\dfrac{1}{4.5\Omega}\right)U_{n2}=\dfrac{6\text{V}}{4.5\Omega} \end{cases}$$

$$I=0.5\text{A}$$

$$\Rightarrow U_{n1}=1\text{V}$$