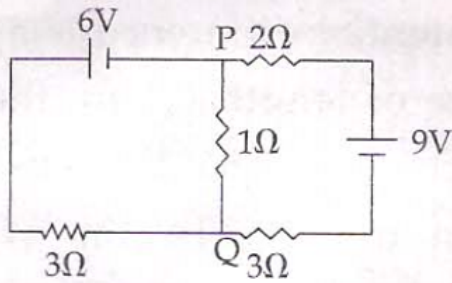
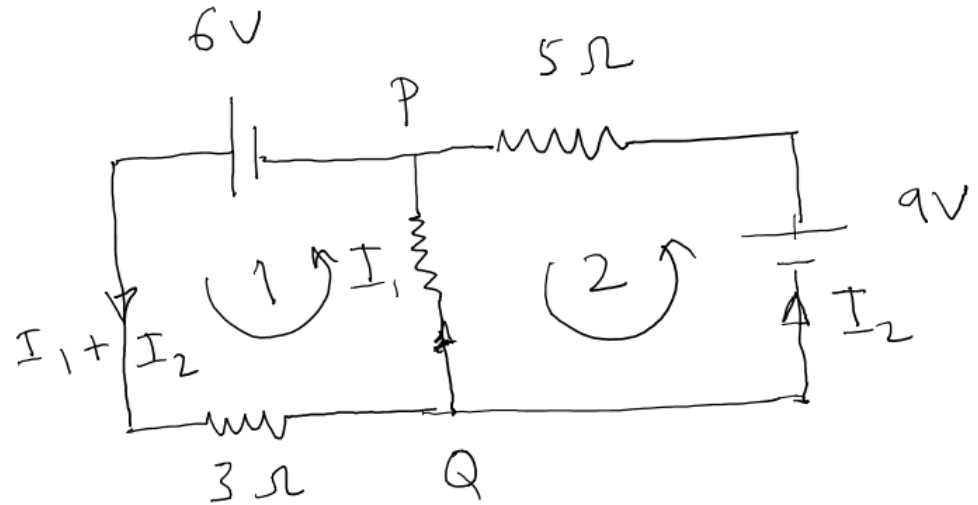


8.



In the circuit shown, the current in the  $1\Omega$  resistor is :

- (1) 0.13 A, from Q to P  $\rightarrow$  correct
- (2) 0.13 A, from P to Q
- (3) 1.3 A, from P to Q
- (4) 0A



The equivalent circuit is shown.

Equation for loop 1:  $6 - (I_1 + I_2)3 - I_1 = 0$  — (1)

Equation for loop 2:  $9 - 5I_2 + I_1 = 0$  — (2)

Eqn (1)  $\times 5$  - Eqn (2)  $\times 3$  gives:  $3 - 23I_1 = 0$

$$I_1 = \frac{3}{23} \approx 0.13 \text{ A } \text{ Q to P}$$

Hence option (1) is correct