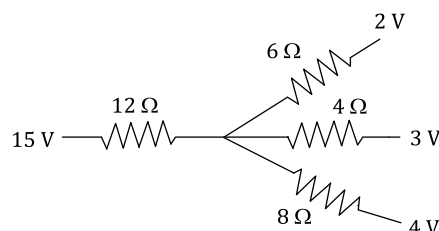


DPP -3

1. Find the current through 12Ω resistor in figure is $k / 180$, then value of $k =$

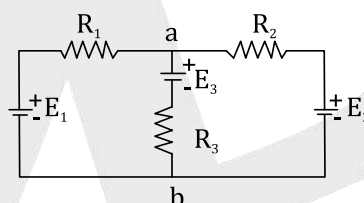


2. Calculate the current through each resistance in the given circuit the potential difference between the points a and b is $N/11$, then $N =$ _____

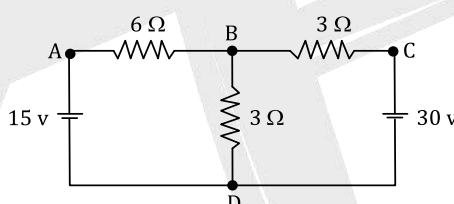
$$E_1 = 6\text{ V}, \quad E_2 = 8\text{ V}, \quad E_3 = 10\text{ V},$$

$$R_1 = 5\Omega, \quad R_2 = 10\Omega, \quad R_3 = 4\Omega$$

Assume that all the cells have no internal resistance.

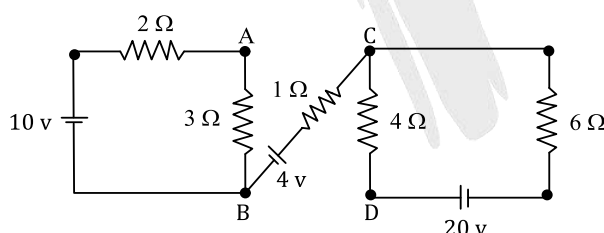


3. In the circuit shown in Fig., find the current through the branch BD.



- (A) 3 (B) 4 (C) 12 (D) 5

4. In the circuit shown in Fig., determine the voltage drop between A and D.



- (A) $10/3$ (B) $5/3$ (C) 6 (D) 5

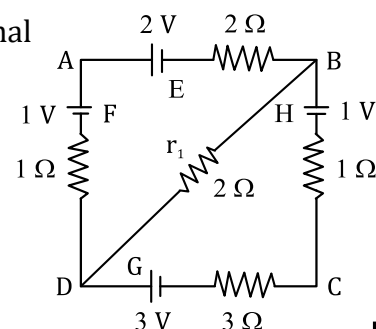
5. In the circuit shown in Fig., E, F, G, and H are cells of emf 2, 1, 3, and 1 V, respectively. The resistances $2\Omega, 1\Omega, 3\Omega$, and 1Ω are their respective internal resistances. Find the potential difference between B and D.

(A) $10/3$

(B) $5/3$

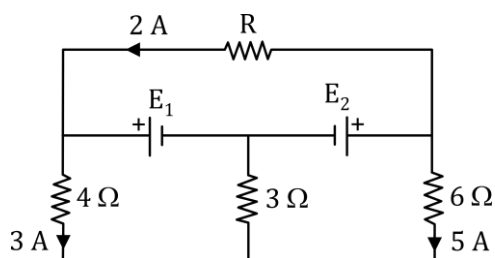
(C) $11/3$

(D) $23/3$



Comprehension Q.6 to Q.8

Based on the circuit diagram shown answer the following questions.



6. The current in the 3Ω resistor is
 (A) 2 A (B) 4 A (C) 8 A (D) 10 A
7. The respective E_1 and E_2 values, in volt, are given by
 (A) $34, 56$ (B) $36, 54$ (C) $54, 36$ (D) $56, 34$
8. The resistance R , in ohm is
 (A) 3Ω (B) 6Ω (C) 7.5Ω (D) 9Ω

ANSWER KEY

1. 157 2. 90 3. (D) 4. (C) 5. (A) 6. (C) 7. (B)
8. (D)

A