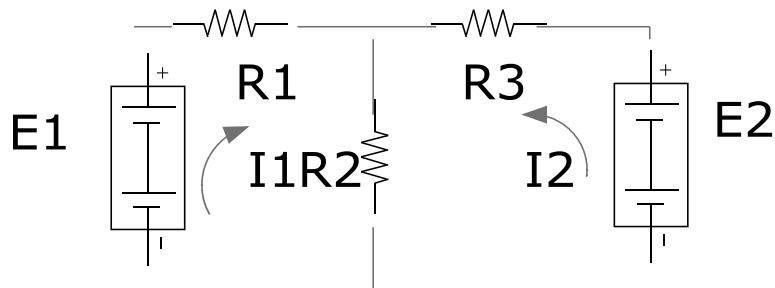


G048 Online Test

Ref418

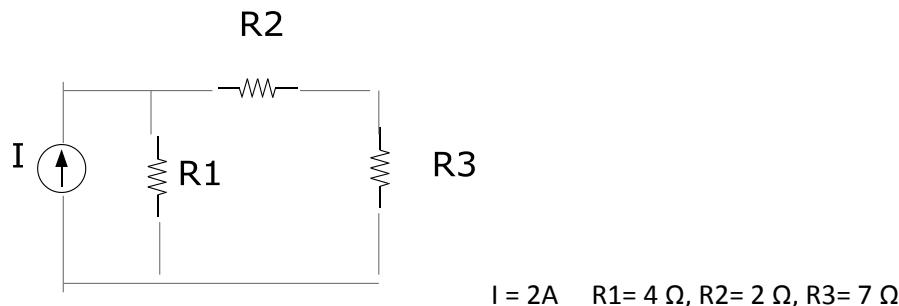


$$R_1 = 2 \Omega, R_2 = 4 \Omega, R_3 = 1 \Omega, E_1 = 2V, E_2 = 6V$$

Find I1 and I2 by using Kirchoff's voltage law.

A	1A, 2A	B	0.5A, 1A
C	-1A, -2A	D	-3A, -4A
Answer			

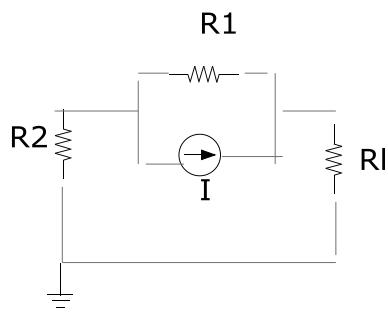
Ref419



Thevenin's equivalent resistance and voltage of the given circuit are

A	6 Ω, 8V	B	3 Ω, 4V
C	12 Ω, 16V	D	24 Ω, 32V
Answer			

Ref420

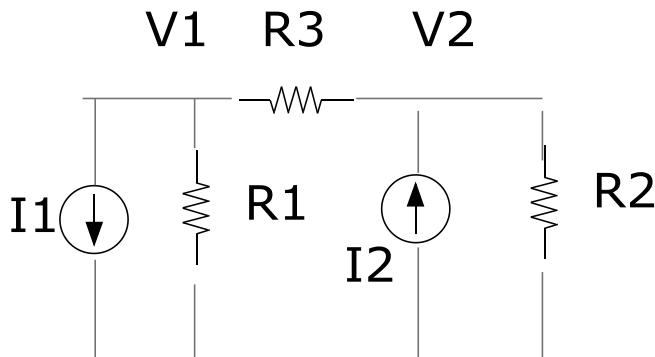


$$R_1 = 5 \Omega, R_2 = 4 \Omega, R_L = 9 \Omega, I = 10A$$

Norton equivalent current of the given circuit is

A	11A	B	22A
C	5.55A	D	2.75A
Answer			

Ref421

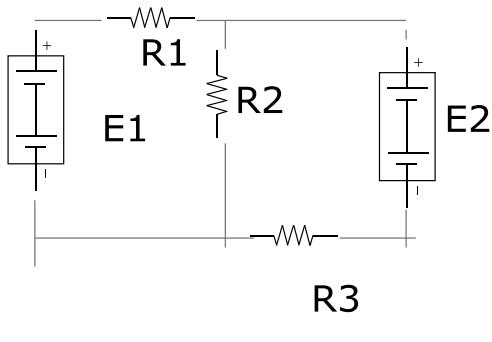


$$I_1 = 2A, R_1 = 6 \Omega, R_2 = 4 \Omega, R_3 = 3 \Omega, I_2 = 3A$$

The voltages V1 & V2 solved by Nodal analysis are

A	$V_1 = -0.92V, V_2 = 4.615V$	B	$2V_1 = 1V, V_2 = 4V$
C	$V_1 = 2V, V_2 = 8V$	D	$V_1 = 3V, V_2 = 7V$
Answer			

Ref422

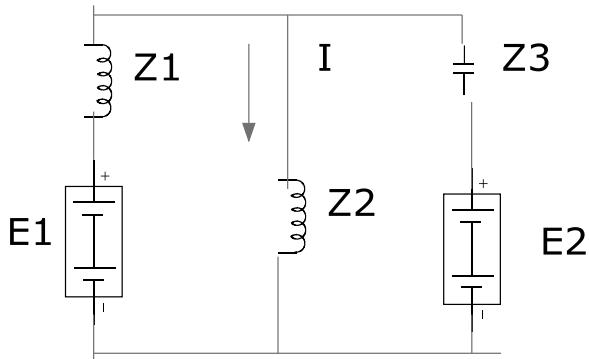


$$E_1 = 54V, R_1 = 24 \Omega, R_2 = 12 \Omega, R_3 = 4 \Omega, E_2 = 48V$$

The current passing through R_3 calculated by Superposition Theorem is

A	5A	B	7A
C	2.5A	D	1.25A
Answer			

Ref423



$$E_1 = 10 \angle 0^\circ V$$

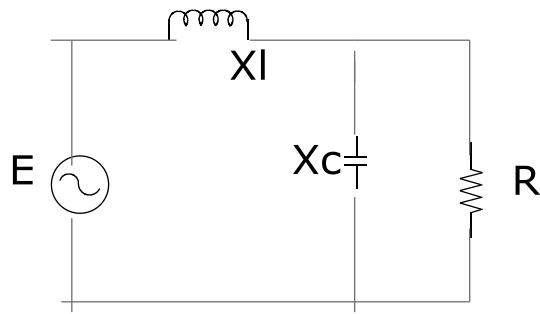
$$E_1 = 5 \angle 0^\circ V$$

$$Z_1 = j4 \Omega \quad Z_2 = j4 \Omega \quad Z_3 = -j3 \Omega$$

The value of the current calculated by Superposition theorem is

A	6.25 Angle -90 Deg	B	6.25 Angle 0 Deg
C	6.25 120 Deg	D	6.25 Angle 90 Deg
Answer			

Ref424



$$E = 10(\text{Angle } 0) \text{ V}, \quad X_I = j 8 \Omega \quad X_C = -j 8 \Omega$$

Thevenin's equivalent voltage and impedance of the given network are

A	$V_{th} = 3.33 (\text{Angle } -120) \text{ V}$, $Z_{th} = 2.67 (\text{Angle } -90) \Omega$	B	$V_{th} = 3.33 (\text{Angle } -80) \text{ V}$, $Z_{th} = 1.35 (\text{Angle } 0) \Omega$
C	$V_{th} = 3.33 (\text{Angle } -180) \text{ V}$, $Z_{th} = 2.67 (\text{Angle } -90) \Omega$	D	$V_{th} = 3.33 (\text{Angle } 0) \text{ V}$, $Z_{th} = 2.67 (\text{Angle } 0) \Omega$
Answer			