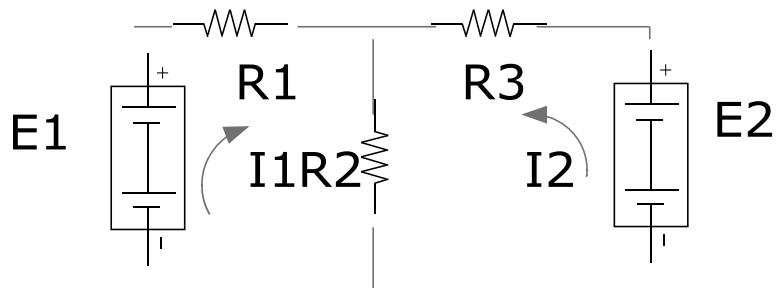


G048 Online Test

Ref418

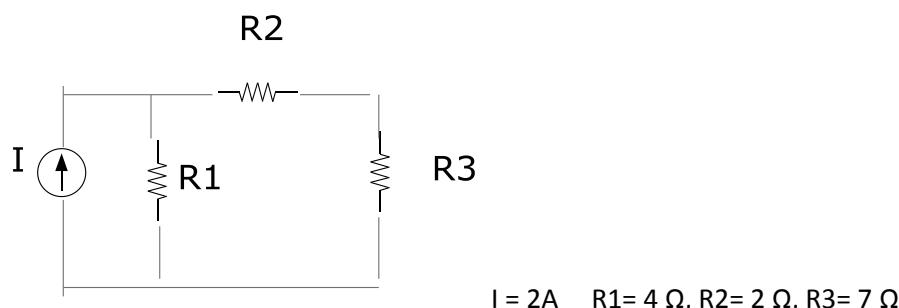


$$R_1 = 2 \Omega, R_2 = 4 \Omega, R_3 = 1 \Omega, E_1 = 2V, E_2 = 6V$$

Find I_1 and I_2 by using Kirchoff's voltage law.

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

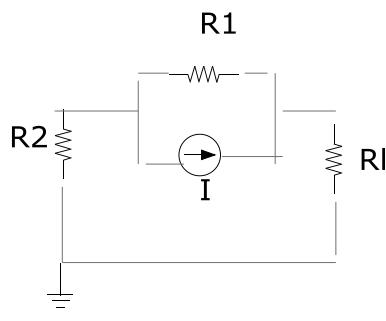
Ref419



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

A	$24 \Omega, 32V$	B	$3 \Omega, 4V$
C	$12 \Omega, 16V$	D	$6 \Omega, 8V$
Answer			

Ref420

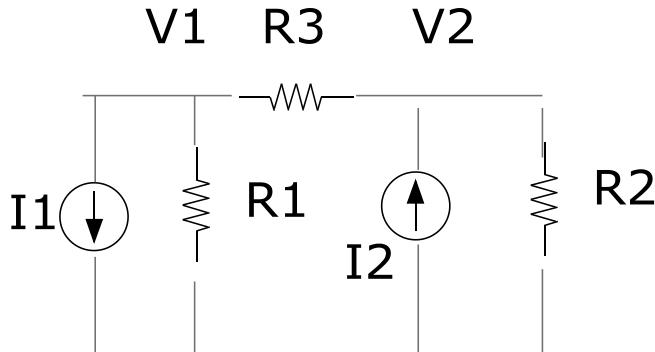


$$R_1 = 5 \Omega, R_2 = 4 \Omega, R_L = 9 \Omega, I = 10A$$

Norton equivalent current of the given circuit is

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

Ref421

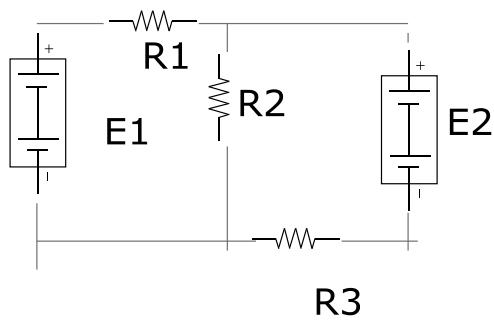


$$I_1 = 2A, R_1 = 6 \Omega, R_2 = 4 \Omega, R_3 = 3 \Omega, I_2 = 3A$$

The voltages V1 & V2 solved by Nodal analysis are

A	2V1= 1V, V2= 4V	B	V1=-0.92V, V2=4.615V
C	V1= 2V, V2= 8V	D	V1= 3V, V2= 7V
Answer			

Ref422

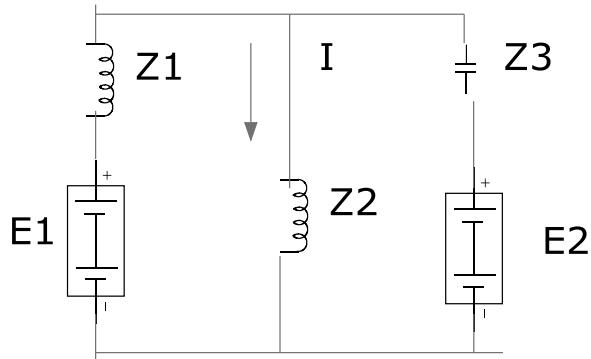


$$E_1 = 54V, R_1 = 24 \Omega, R_2 = 12 \Omega, R_3 = 4 \Omega, E_2 = 48V$$

The current passing through R3 calculated by Superposition Theorem is

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

Ref423



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

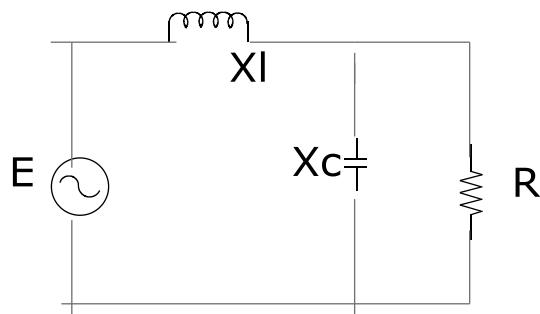
$$E_1 = 5 \angle 0^\circ V$$

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

The value of the current calculated by Superposition theorem is

A	6.25 120 Deg	B	6.25 Angle 0 Deg
C	6.25 Angle -90 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	$V_{th} = 3.33 (\text{Angle } 0) \text{ V}$, $Z_{th} = 2.67 (\text{Angle } 0) \Omega$	D	$V_{th} = 3.33 (\text{Angle } -180) \text{ V}$, $Z_{th} = 2.67 (\text{Angle } -90) \Omega$
Answer			