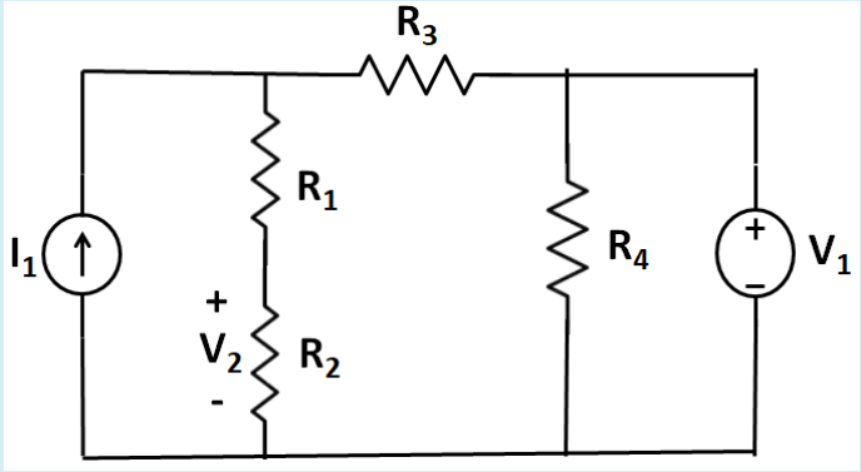
Question 1

Correct

Mark 3.00 out of 3.00

Flag question

In the following circuit, find the voltage V_2 (in Volt) across the resistor R_2. Given $R_1 = 9\ \Omega$, $R_2 = 8\ \Omega$, $R_3 = 10\ \Omega$, $R_4 = 9\ \Omega$, $I_1 = 10$ A, $V_1 = 7$ V.



Answer: 31.704

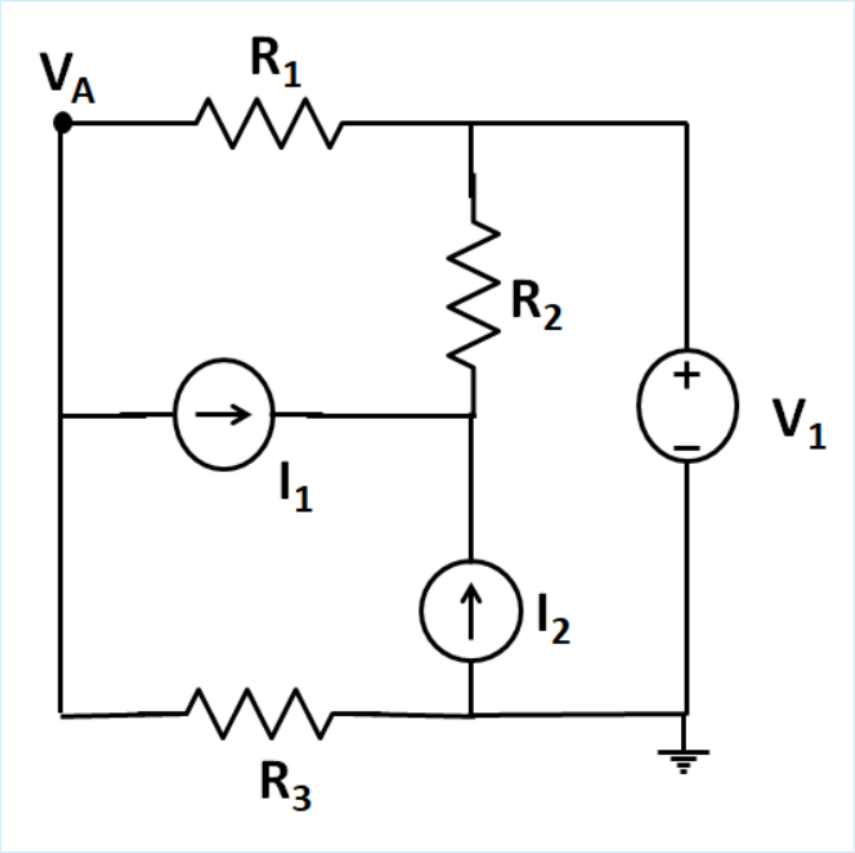
Question 2

Correct

Mark 3.00 out of 3.00

Flag question

In the following circuit, find the node voltage V_A (in Volt). Given R_1= 8 Ω, R_2= 9 Ω, R_3= 7 Ω, V_1= 7 V, I_1= 8 A, I_2= 9 A.



Answer: -26.6

Question 3

Correct

Mark 2.00 out of 2.00

Flag question

The charge flowing through a conductor is given by q = 48t *Sin*(4πt) mC in 0.5 s. Calculate the current (in mA) flowing through the conductor at t = 0.5 s.

Select one:

- 198.72
- -150.72
- 24.00
- 301.44 ✓

Your answer is correct.

The correct answer is: 301.44

Question 4

Correct

Mark 2.00 out of 2.00

Flag question

Consider three resistors each having a resistance of 134 Ω. Let R_S be the equivalent resistance when the resistances are connected in series. Similarly, R_P be the equivalent resistance when the resistances are connected in parallel.

The ratio $\frac{R_S}{R_P}$ is equal to_____.

Select one:

- 3
- 9 ✓
- 1
- 134

Your answer is correct.

The correct answer is: 9

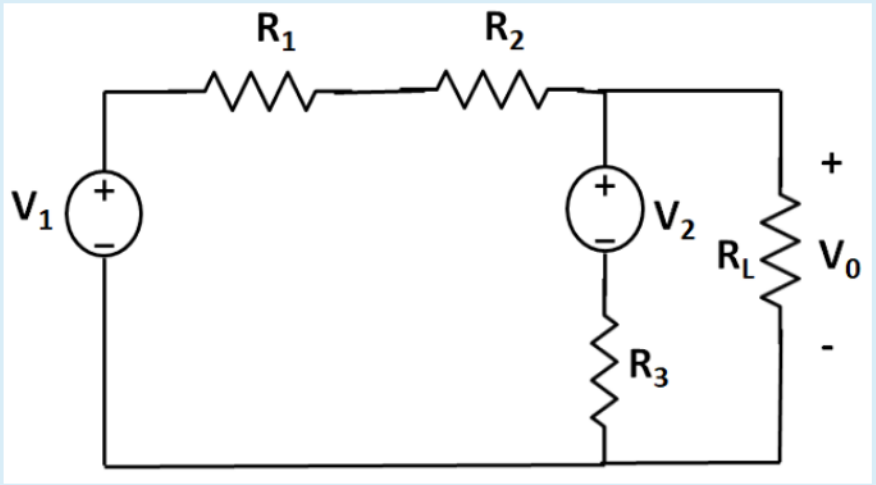
Question 5

Correct

Mark 3.00 out of 3.00

Flag question

In the following circuit, find the voltage V_0 (in Volt) across the resistor R_L. Given R_1= 6 kΩ, R_2= 10 kΩ, R_3= 8 kΩ, R_L= 6 kΩ, V_1= 8 V, V_2= 9 V.



Select one:

- 2.29
- 9.18
- 1.53
- 4.59 ✓

Question 6

Correct

Mark 2.00 out of 2.00

Flag question

A voltage source V_S= 8.4 V, and two resistors R_1= 7.5 Ω and R_L (in Ω) are connected in series to form a circuit. The maximum power (in Watt) that can be transferred to the load resistor R_L is 2.352 ✓ .