

REVISION

QUESTION

1. A circuit is shown in Figure 1. The circuit consists of a 12V DC source, a 10Ω resistor, a 20Ω resistor, and a 30Ω resistor. The 10Ω resistor and 20Ω resistor are connected in parallel. This parallel combination is connected in series with the 30Ω resistor. Calculate the total resistance of the circuit and the current flowing through the 30Ω resistor.

2. A circuit is shown in Figure 2. The circuit consists of a 12V DC source, a 10Ω resistor, a 20Ω resistor, and a 30Ω resistor. The 10Ω resistor and 20Ω resistor are connected in parallel. This parallel combination is connected in series with the 30Ω resistor. Calculate the total resistance of the circuit and the current flowing through the 30Ω resistor.

ANSWER

1. The circuit in Figure 1 consists of a 12V DC source, a 10Ω resistor, a 20Ω resistor, and a 30Ω resistor. The 10Ω resistor and 20Ω resistor are connected in parallel. This parallel combination is connected in series with the 30Ω resistor. Calculate the total resistance of the circuit and the current flowing through the 30Ω resistor.



2. The circuit in Figure 2 consists of a 10V DC source, a 10Ω resistor, a 20Ω resistor, and a 30Ω resistor. The 10Ω resistor and 20Ω resistor are connected in parallel. This parallel combination is connected in series with the 30Ω resistor. Calculate the total resistance of the circuit and the current flowing through the 30Ω resistor.