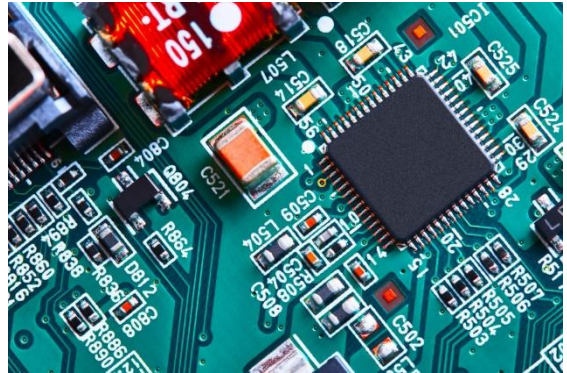
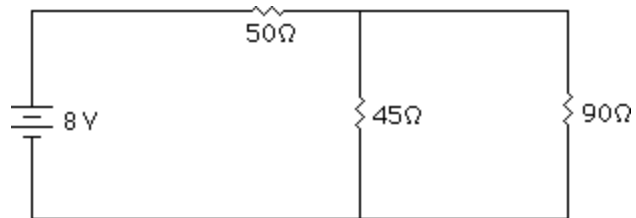


Essential Circuit Problem Examples

1.



What is the total resistance of the circuit?

80 ohms.

What is the total current leaving the battery?

0.1 Amps.

What is the current through the 45 ohm resistor?

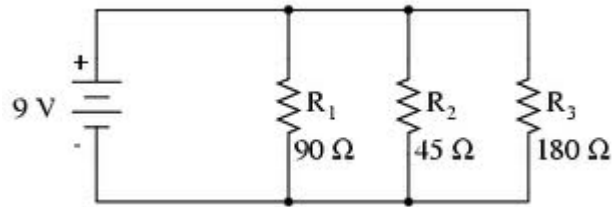
0.067 Amps

What is the voltage loss across the 50 ohm, 45 ohm, and 90 ohm resistors?

5 V, 3V, 3V

Find the power dissipated by the 45 ohm resistor

2.

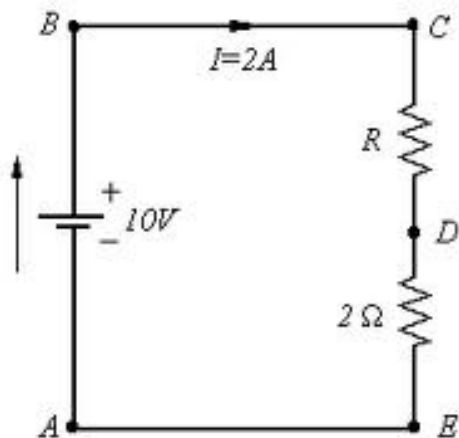


What is the current running through each resistor?

What is the total current leaving the 9V battery?

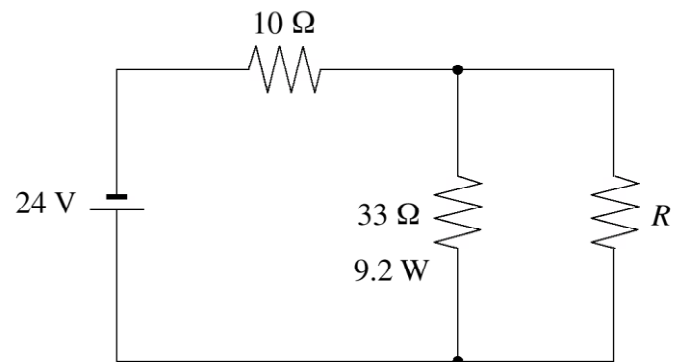
What is the total resistance of this circuit?

3. Find **R** and the **power** used by R.



4.

What is the total power dissipated by the three resistors in the circuit shown below?



- A. $12\ \text{W}$
- B. $16\ \text{W}$
- C. $23\ \text{W}$
- D. $30\ \text{W}$

5.

What is the power dissipated in the $8.0\ \Omega$ resistor in the circuit as shown?

(7 marks)

