

31 There is a potential difference V across a resistor of resistance R . The current in the resistor is I .

Which equation gives the power P dissipated by the resistor?

- A** $P = V^2 I$ **B** $P = \frac{V^2}{I}$ **C** $P = V^2 R$ **D** $P = \frac{V^2}{R}$

32 The current in a resistor of constant resistance is 8.0 mA. The power dissipated by the resistor is P .

The current in the resistor is increased to 12.0 mA.

What is the new power dissipated by the resistor?

- A** $0.44P$ **B** $0.67P$ **C** $1.5P$ **D** $2.3P$

30 What is equivalent to one volt?

- A** one coulomb per second
B one joule per coulomb
C one joule per second
D one joule second per coulomb squared