

- 33 A resistor has resistance R . When the potential difference (p.d.) across the resistor is V , the current in the resistor is I . The power dissipated in the resistor is P . Work W is done when charge Q flows through the resistor.

What is **not** a valid relationship between these variables?

A $I = \frac{P}{V}$

B $Q = \frac{W}{V}$

C $R = \frac{P}{I^2}$

D $R = \frac{V}{P}$