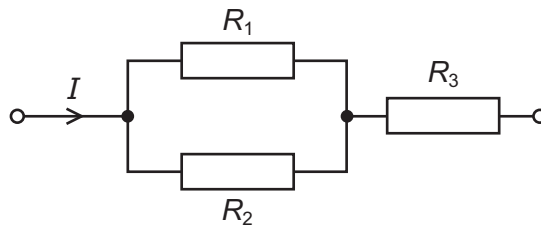**37** The diagram shows a resistor network. The potential difference across the network is V.

Is the equation shown below correct for the network?

$$V = I(1/R_1 + 1/R_2 + R_3)$$

A   Yes, it correctly combines two series resistors with one parallel resistor, and correctly uses Ohm's Law.

B   Yes, it correctly combines two parallel resistors with one series resistor, and correctly uses Ohm's Law.

C   No, because it should read $V = I \div (1/R_1 + 1/R_2 + R_3)$.

D   No, because the terms $1/R_2$ and R_3 have different units and cannot be added.

Space for working