

- 4** The resistance R of a resistor is determined by measuring the potential difference V across it and the current I in it. The value of R is then calculated using the equation

$$R = \frac{V}{I}.$$

The values measured are $V = 1.00 \pm 0.05 \text{ V}$ and $I = 0.50 \pm 0.01 \text{ A}$.

What is the percentage uncertainty in the value of R ?

- A** 2.5% **B** 3.0% **C** 7.0% **D** 10.0%