

- 5 The resistance R of a resistor is to be determined. The current I in the resistor and the potential difference V across it are measured.

The results, with their uncertainties, are

$$I = (2.0 \pm 0.2)\text{A} \qquad V = (15.0 \pm 0.5)\text{V}.$$

The value of R is calculated to be $7.5\,\Omega$.

What is the uncertainty in this value for R ?

- A** $\pm 0.3\,\Omega$ **B** $\pm 0.5\,\Omega$ **C** $\pm 0.7\,\Omega$ **D** $\pm 1\,\Omega$

Space for working