

4 An experiment is carried out to measure the resistance of a wire.

The current in the wire is $(1.0 \pm 0.2)\text{A}$ and the potential difference across the wire is $(8.0 \pm 0.4)\text{V}$.

What is the resistance of the wire and its uncertainty?

- A** $(8.0 \pm 0.2)\Omega$
- B** $(8.0 \pm 0.6)\Omega$
- C** $(8 \pm 1)\Omega$
- D** $(8 \pm 2)\Omega$

5 The Young modulus of the material of a wire is to be found. The Young modulus E is given by the