

**4** A steel wire is stretched in an experiment to determine the Young modulus for steel.

The uncertainties in the measurements are given below.

measurement	uncertainty
load on wire	$\pm 2\%$
length of wire	$\pm 0.2\%$
diameter of wire	$\pm 1.5\%$
extension	$\pm 1\%$

What is the percentage uncertainty in the Young modulus?

**A** 1.3%

**B** 1.8%

**C** 4.7%

**D** 6.2%

**5** The acceleration of free fall on the Moon is one-sixth of that on Earth.