

- 4 A metre rule is used to measure the length of a piece of wire. It is found to be 70 cm long to the nearest millimetre.

How should this result be recorded in a table of results?

- A** 0.7 m                      **B** 0.70 m                      **C** 0.700 m                      **D** 0.7000 m

- 5 A quantity  $x$  is to be determined from the equation

$$x = P - Q.$$

$P$  is measured as  $1.27 \pm 0.02$  m.

$Q$  is measured as  $0.83 \pm 0.01$  m.

What is the percentage uncertainty in  $x$  to one significant figure?

- A** 0.4 %                      **B** 2 %                      **C** 3 %                      **D** 7 %

- 6 A football is dropped from the top of a three-storey building. It falls through air until it reaches the ground.

What remains constant throughout the fall?

- A** acceleration of the football  
**B** air resistance on the football  
**C** velocity of the football  
**D** weight of the football

**Space for working**