

- 5 A micrometer screw gauge is used to measure the diameter of a small uniform steel sphere. The micrometer reading is  $5.00 \text{ mm} \pm 0.01 \text{ mm}$ .

What will be the percentage uncertainty in a calculation of the volume of the sphere, using these values?

- A** 0.2%                      **B** 0.4%                      **C** 0.6%                      **D** 1.2%

- 6 One object moves directly from P to R.



In a shorter time, a second object moves from P to Q to R.

Which statement about the two objects is correct for the journey from P to R?

- A** They have the same average speed.  
**B** They have the same average velocity.  
**C** They have the same displacement.  
**D** They travel the same distance.

**Space for working**