

- 4 A student intends to measure accurately the diameter of a wire (known to be approximately 1 mm) and the internal diameter of a pipe (known to be approximately 2 cm).

What are the most appropriate instruments for the student to use to make these measurements?

	wire	pipe
A	calipers	calipers
B	calipers	micrometer
C	micrometer	calipers
D	micrometer	micrometer

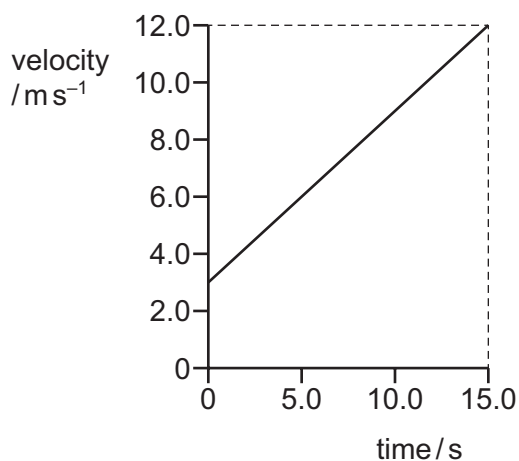
- 5 The power P dissipated in a resistor of resistance R is calculated using the expression

$$P = \frac{V^2}{R}$$

where V is the potential difference (p.d.) across the resistor. The percentage uncertainty in V is 5% and in R is 2%.

What is the percentage uncertainty in P ?

- A** 3% **B** 7% **C** 8% **D** 12%
- 6 The velocity-time graph for an object of mass 2.5 kg is shown.



What is the resultant force acting on the object?

- A** 0.60 N **B** 0.80 N **C** 1.5 N **D** 2.0 N