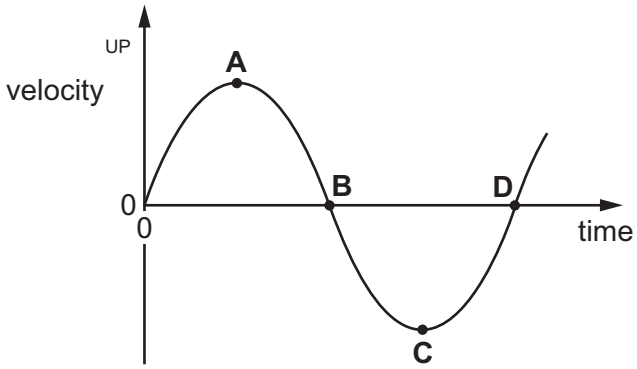
6 In an experiment to determine the acceleration of free fall g, a ball-bearing is held by an electromagnet. When the current to the electromagnet is switched off, a clock starts and the ball-bearing falls. After falling a distance h, the ball-bearing strikes a switch to stop the clock which measures the time t of the fall.

Which expression can be used to calculate the value of g?

A $\frac{ht^2}{2}$ **B** $\frac{th^2}{2}$ **C** $\sqrt{\frac{2t}{h^2}}$ **D** $\frac{2h}{t^2}$

7 The diagram shows a velocity-time graph for a mass moving up and down on the end of a spring.

Which point represents the velocity of the mass when at the lowest point of its motion?



Space for working