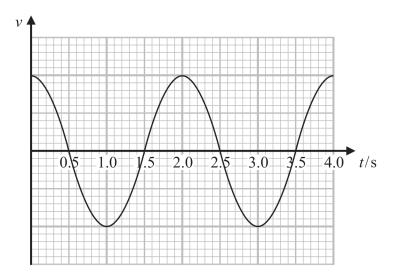
- **14** A student set up a simple pendulum. The student used a velocity sensor connected to a data logger to record the velocity of the pendulum bob.
 - (a) The graph shows how the velocity of the bob varied with time.



(i) Add a line to the graph to show how the displacement of the bob varied with time during the same time interval.

(2)

(ii) Determine the length of the simple pendulum.

(3)

Length of simple pendulum =

(b) In some experiments, it is an advantage to use a data logger rather than other measuring instruments.

Describe when the use of a data logger is an advantage.

(2)