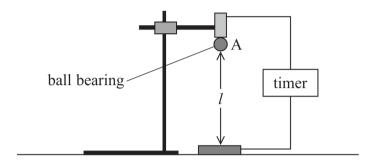**SECTION B**

Answer ALL questions in the spaces provided.

11 A student carried out an experiment to measure the acceleration of free-fall g.

A ball bearing was released from position A. The time t for the ball bearing to fall a distance l was measured. This was repeated for decreasing values of l.

Explain how the measurements obtained can be used to determine a value for g in $\mathrm{m\,s^{-2}}$. Your answer should include a sketch on the axes below of the graph that the student would expect to obtain.

(5)

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(Total for Question 11 = 5 marks)