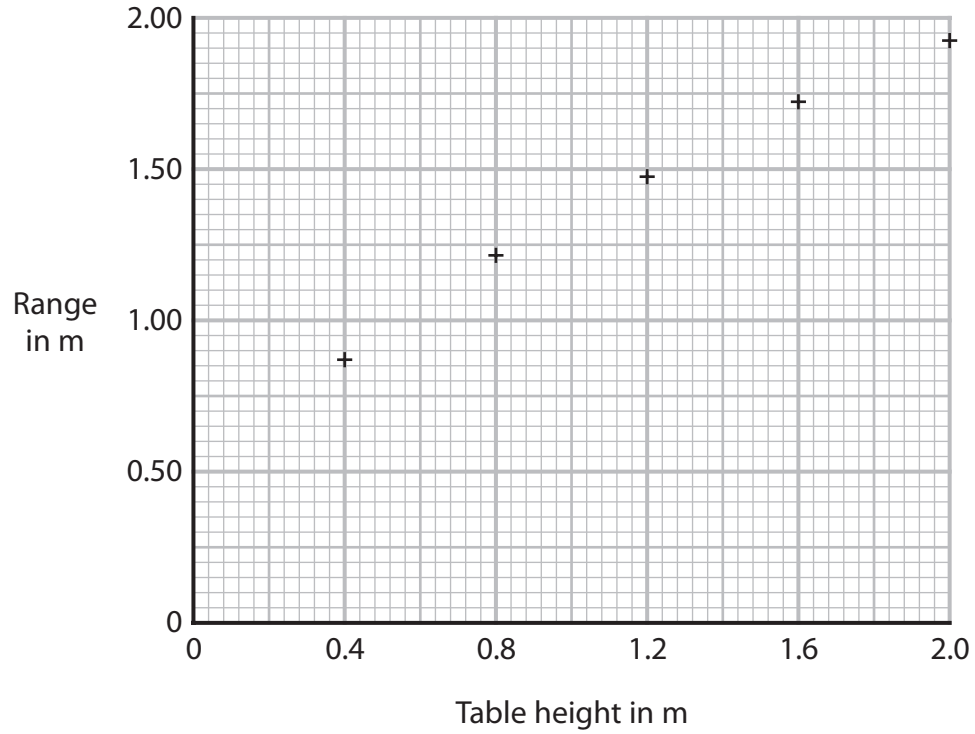
(b) The graph shows the student's results.



(i) Draw the curve of best fit.

(1)

(ii) Estimate what the height of the table would be when the range of the projectile is 0.60 m.

(1)

height = ... m

(iii) Justify why the student has plotted a line graph rather than a bar chart.

(1)

.....

.....

.....

(iv) The range of the projectile is related to the table height by this formula

$$\text{range} = \text{launch speed} \times \sqrt{\frac{\text{table height}}{5}}$$

Using data from the graph, show that the launch speed of the projectile is approximately 3 m / s.

(4)

launch speed = ... m / s

(Total for Question 11 = 13 marks)