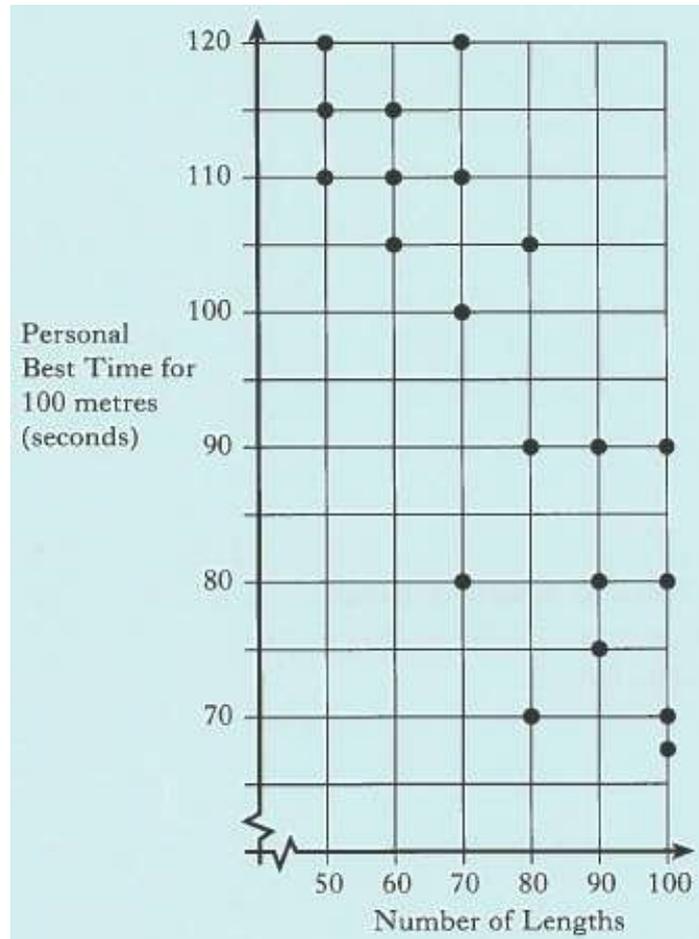


Scatter Graphs & Line of Best Fit Revision Exercise

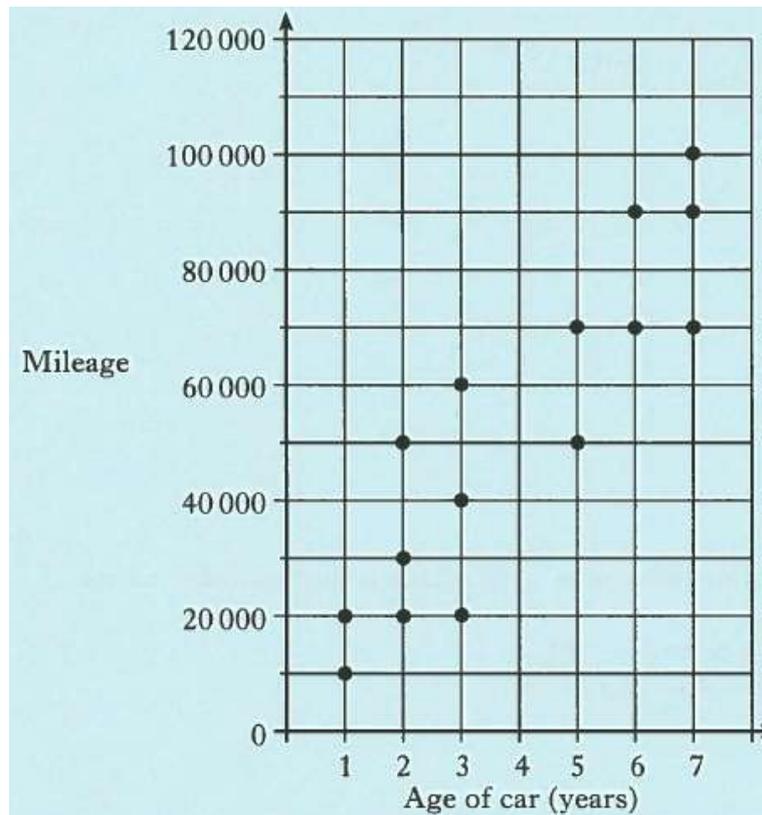
- 1) A group of swimmers record
- the number of lengths they swim in each training session
 - Their personal best time (in seconds) for swimming 100 metres in competition.

The scattergraph shows the result.



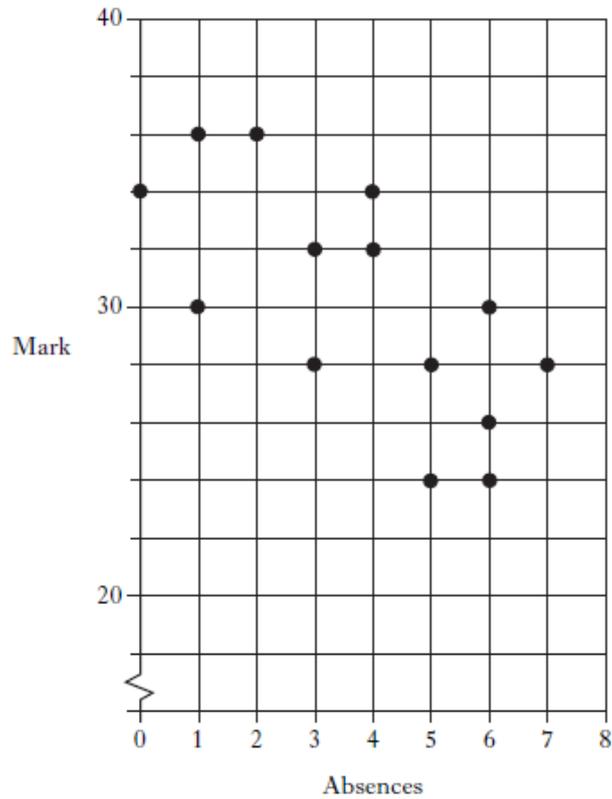
- a) Draw a line of best fit through the points on the graph.
- b) Use the graph to estimate the personal best time of a swimmer who swims 75 lengths in each training session.

2) The scattergraph shows the age and mileage of cars in a garage.



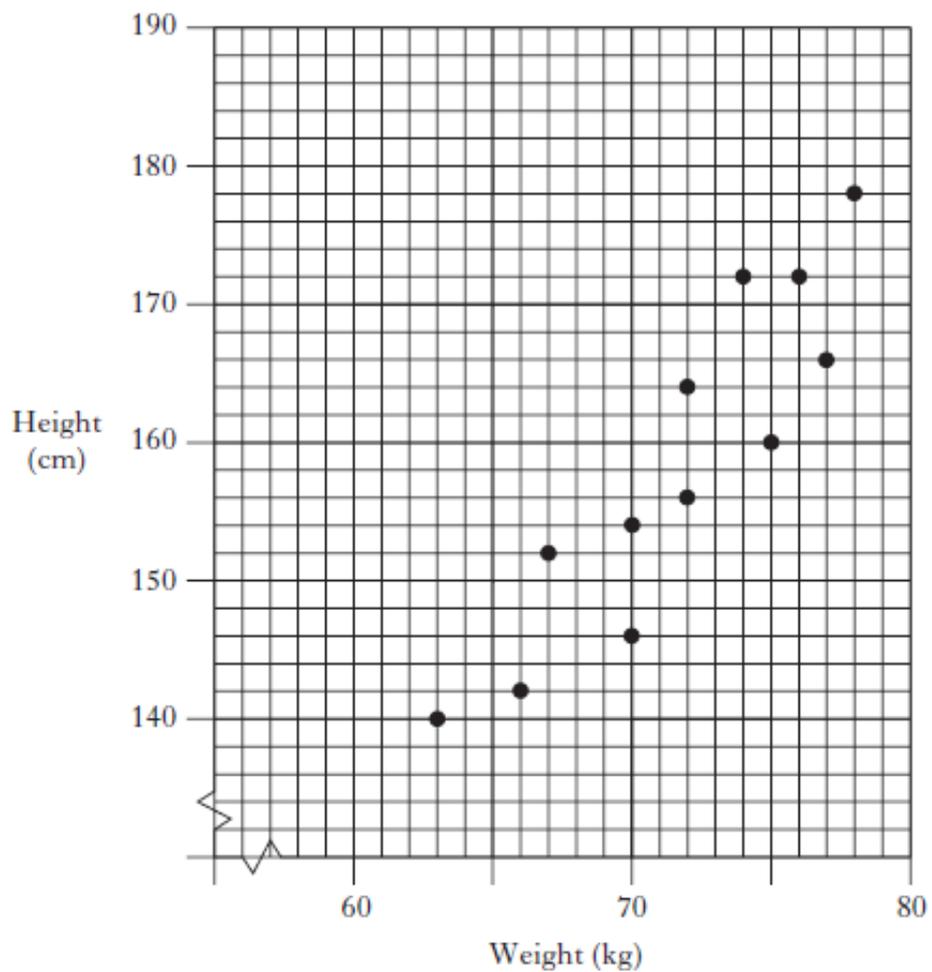
- Draw a line of best fit through the points on the graph.
- Use your line of best fit to estimate the mileage of a 4-year-old car.

- 3) A teacher records the number of absences and the end of term test mark for each of her students. The scattergraph shows the results.



- a) Draw a line of best fit through the points on the graph.
- b) Use your line of best fit to estimate the mark of a student who had 8 absences.

- 4) The scattergraph shows the weights and heights of a group of teenagers.



- a) Draw a line of best fit through the points on the graph.
- b) Use your line of best fit to estimate the height of a teenager whose weight is 80 kilograms.

ANSWERS

- 1)
 - a) Any acceptable line that passes through the points
 - b) Approximately 95 seconds but depends on line on best fit.

- 2)
 - a) Any acceptable line that passes through the points
 - b) Approximately 50000 miles but depends on line on best fit.

- 3)
 - a) Any acceptable line that passes through the points
 - b) Approximately 22 but depends on line on best fit.

- 4)
 - a) Any acceptable line that passes through the points
 - b) Approximately 176 cm but depends on line on best fit.