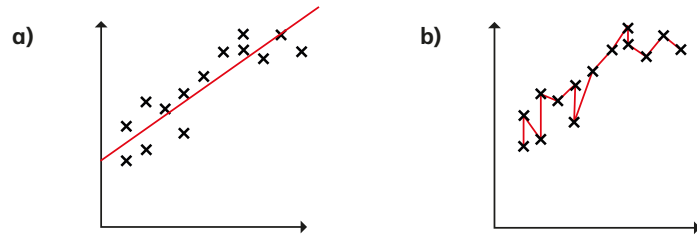
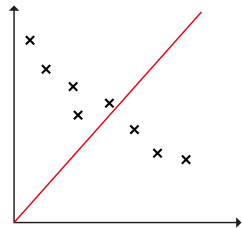


Draw and use line of best fit

- 1 Do the scatter graphs show the best line of best fit?
Explain your reasoning.



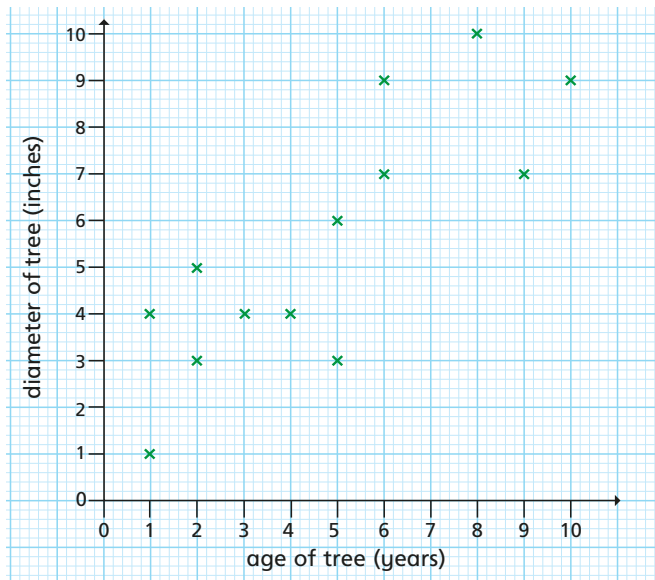
- 2 Eva draws a line of best fit on the scatter graph.



What mistake has Eva made?

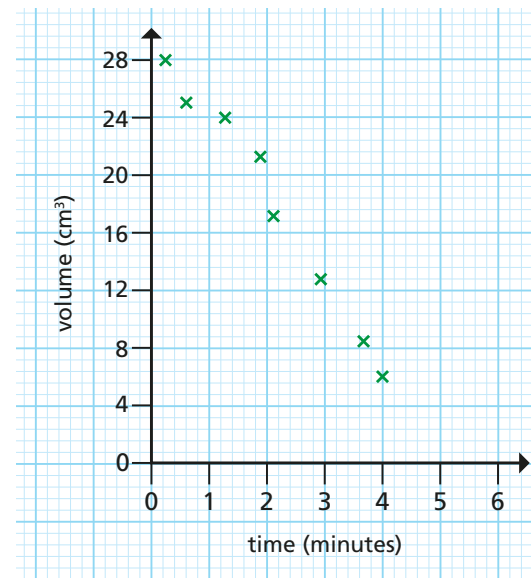
Draw a line of best fit on the scatter graph.

- 3 Here is the scatter graph for the age of a tree and the diameter of its trunk.



- a) Use your ruler to draw the line of best fit.
b) Does your line have a positive or negative gradient?
c) Do you think your line needs to go through the origin?
Discuss with a partner.
d) Use your line of best fit to predict the diameter of a tree that is 7 years old.

- 4 Whitney has drawn a scatter diagram showing the volume of an ice cube over time.



- a) Draw the line of best fit.
b) Use your line of best fit to predict when the ice cube will have completely melted.

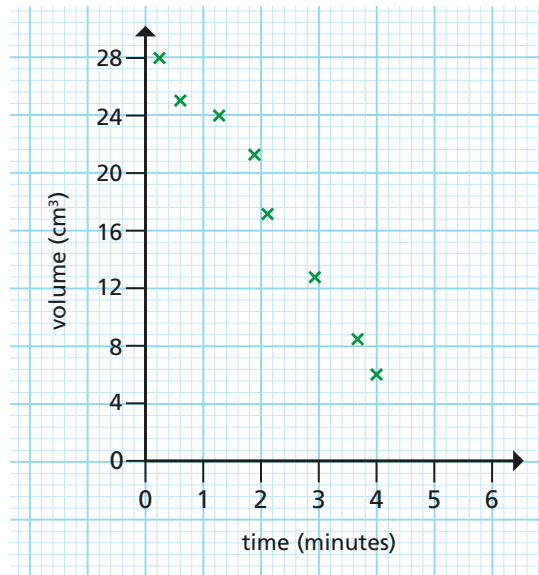
- 5 Are the statements always true, sometimes true or never true?
Give an example to support your answer.

- a) A line of best fit goes through the origin.
b) A line of best fit goes through every point.
c) You can draw a line of best fit on a scatter graph.
Discuss your answers with a partner.

- Use your ruler to draw the line of best fit.
- Does your line have a positive or negative gradient?
- Do you think your line needs to go through the origin?
Discuss with a partner.
- Use your line of best fit to predict the diameter of a tree that is 7 years old.



- 4 Whitney has drawn a scatter diagram showing the volume of an ice cube over time.



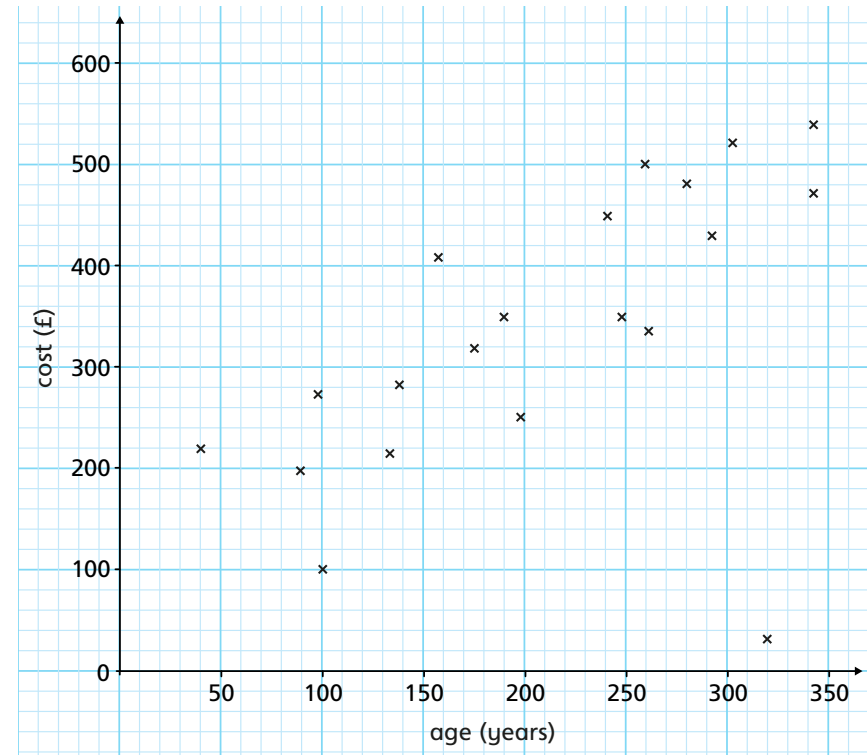
- Draw the line of best fit.
- Use your line of best fit to predict when the ice cube will have completely melted.

- 5 Are the statements always true, sometimes true or never true?
Give an example to support your answer.

- A line of best fit goes through the origin.
- A line of best fit goes through every point.
- You can draw a line of best fit on a scatter graph.
Discuss your answers with a partner.



- 6 The scatter graph shows the cost in pounds of some rare books.



- Which point is the outlier?
- Give a possible reason for the outlier.