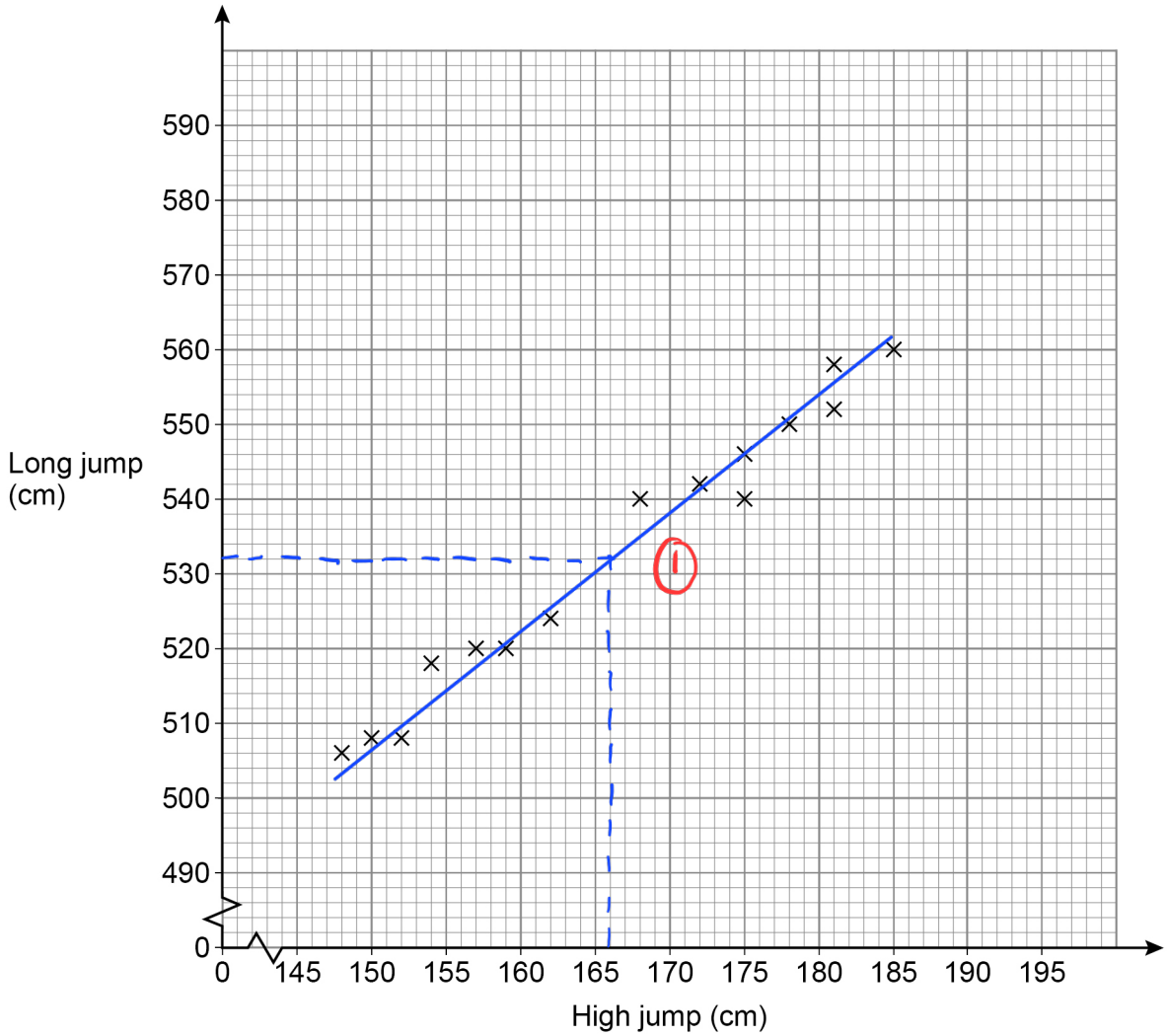
1 The scatter graph shows the best high jump and the best long jump for 15 boys.



1 (a) Write down the type of correlation shown.

[1 mark]

Answer Positive (1)

1 (b) Liam has a best high jump of 166 cm

Use a line of best fit to estimate his best long jump.

[2 marks]

Answer 532 (1) cm

1 (c) Another boy has a best high jump of 195 cm

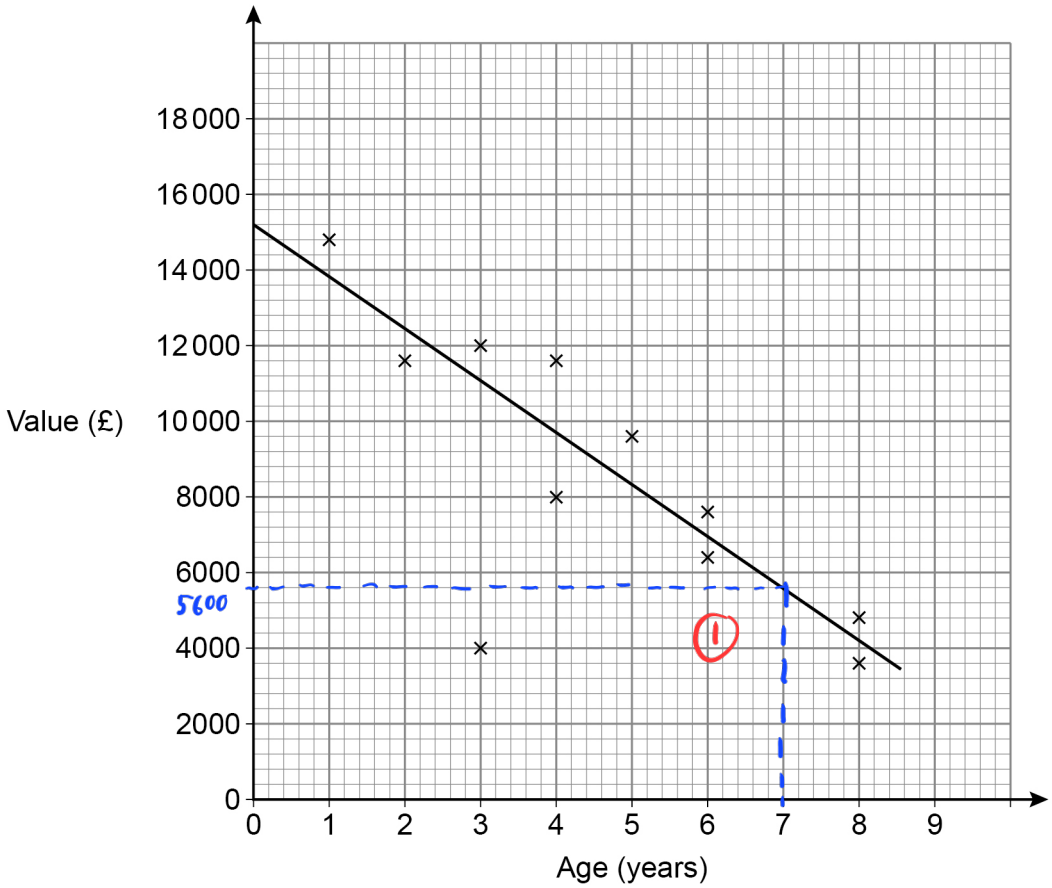
Give a reason why you should **not** use a line of best fit to estimate his best long jump.

[1 mark]

195 exceeds this data (1)

2 The scatter diagram shows the age and value of some cars in 2019

All the cars were of the same make and model.



2 (a) What type of correlation does the scatter graph show?

[1 mark]

Answer Negative (1)

2 (b) Write down the value of the car that was an outlier.

[1 mark]

Answer £ 4000 (1)

2 (c) Use the graph to estimate the value of a new car of this make and model in 2019

year 0

[1 mark]

Answer £ 15 200 (1)

2 (d) A car of this make and model had a value of £5600 in 2019

Use the graph to estimate the year in which it was made.

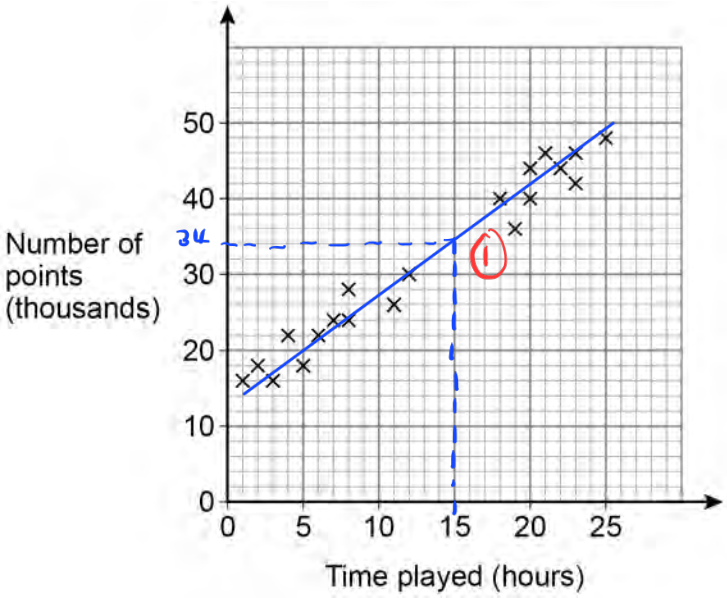
[2 marks]

2019 - 7 = 2012

Answer 2012 (1)

3 Players score points in a game.

The scatter graph shows the time played and the points scored by some players.



3 (a) Circle the strength and type of correlation shown.

[1 mark]

weak positive | strong positive | weak negative | strong negative

3 (b) Players get one extra life for every 2000 points they score.

Jonah plays the game for 15 hours.

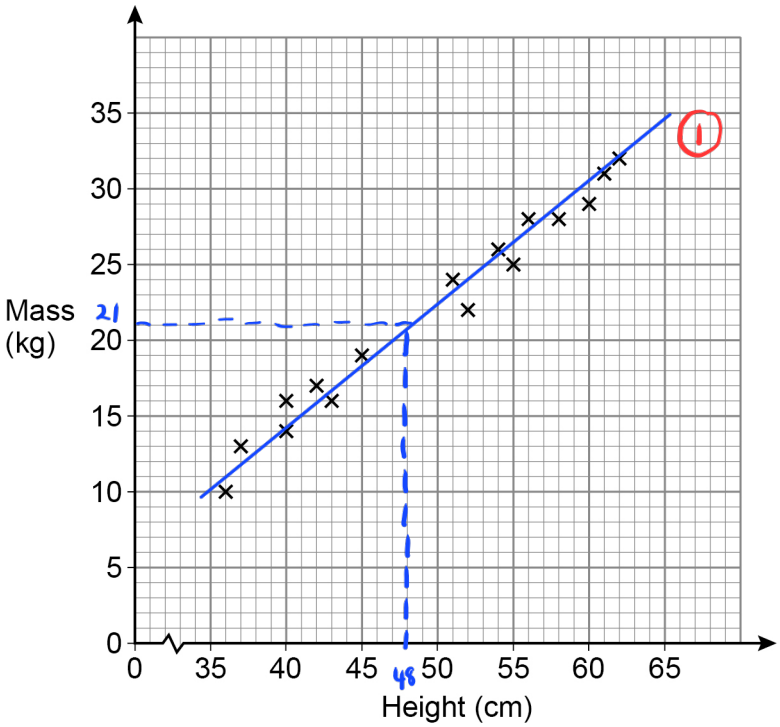
Use a line of best fit to estimate the number of extra lives he gets.

[3 marks]

34000 ÷ 2000 = 17

Answer 17

4 The scatter graph shows the height and mass of some dogs.



4 (a) The scatter graph shows positive correlation.

Describe the relationship between the height and mass of the dogs.

[1 mark]

As the height increases, the mass also increases. (1)

4 (b) Use a line of best fit to estimate the mass of a dog with height 48 cm

[2 marks]

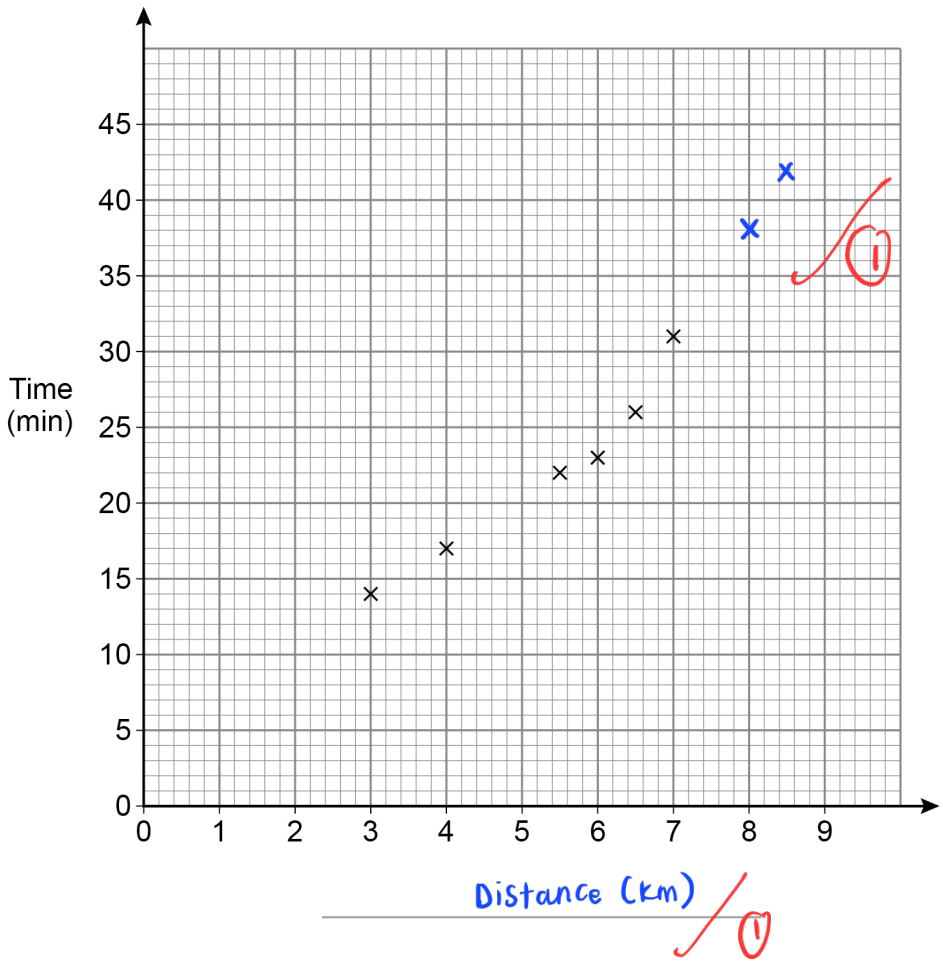
Answer 21 (1) kg

5 Liz records the distance of some runs and the time each run takes.

Distance (km)	3	4	5.5	6	6.5	7	8	8.5
Time (min)	14	17	22	23	26	31	38	42

The scatter graph shows **some** of the information from the table.

Running distances and time taken



5 (a) Complete the graph by adding the missing **label** and plotting the **two** missing points.

[2 marks]

5 (b) Describe the correlation shown in the scatter graph.

[2 marks]

Type of correlation Positive

Strength of correlation Strong