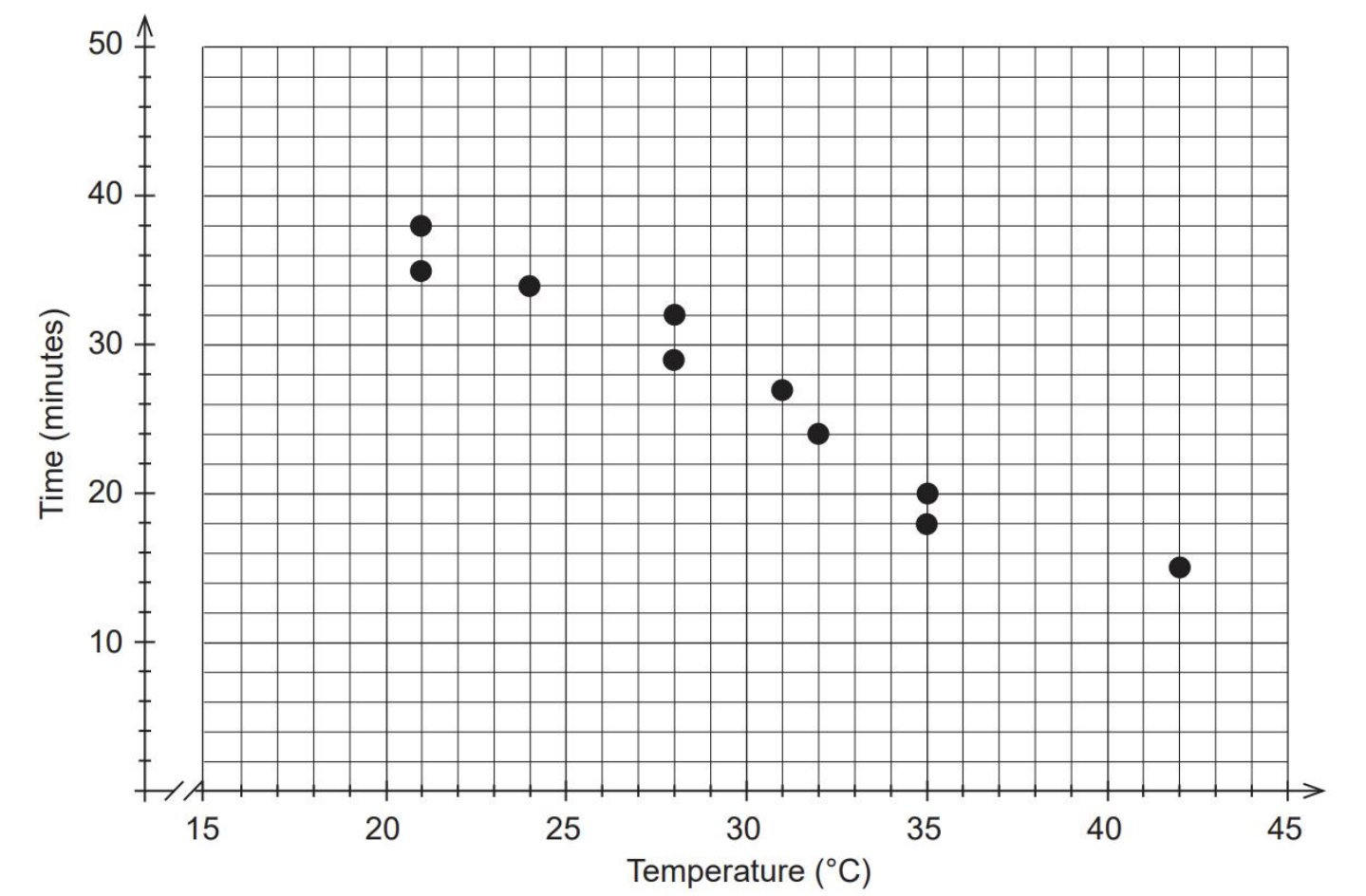


Nullah wanted to see if there was a relationship between outside temperature and the time taken to dry his laundry. The following data was collected over a 10 day period.



Temperature (°C)	28	35	42	31	24	21	21	35	32	28
Time (minutes)	29	20	15	27	34	38	35	18		

- (a) Complete the table by locating the data in the graph. (2 marks)
- (b) Determine the equation of the least-squares line and state the correlation coefficient. (2 marks)

(c) Draw the least-squares line onto the graph above.

(2 marks)

- (d) Describe the association between the two variables in terms of direction and strength. (2 marks)
- (e) What percentage of the variation in drying time can be explained by the variation in outside temperature? (1 mark)
- (f) Identify at least one other factor that could explain the variation in drying time. (1 mark)
- (g) The temperature on Day 11 is predicted to be 17 °C.
- (i) Use the equation for the least-squares line from part (b) to predict the time Nullah should expect his laundry to dry on this day. (1 mark)
- (ii) Is this prediction reliable? Justify your answer. (2 marks)