

- 15** Lee wishes to find out if there is a relationship between a person's age and the time it takes them to complete a puzzle.

Lee decides to conduct an experiment.

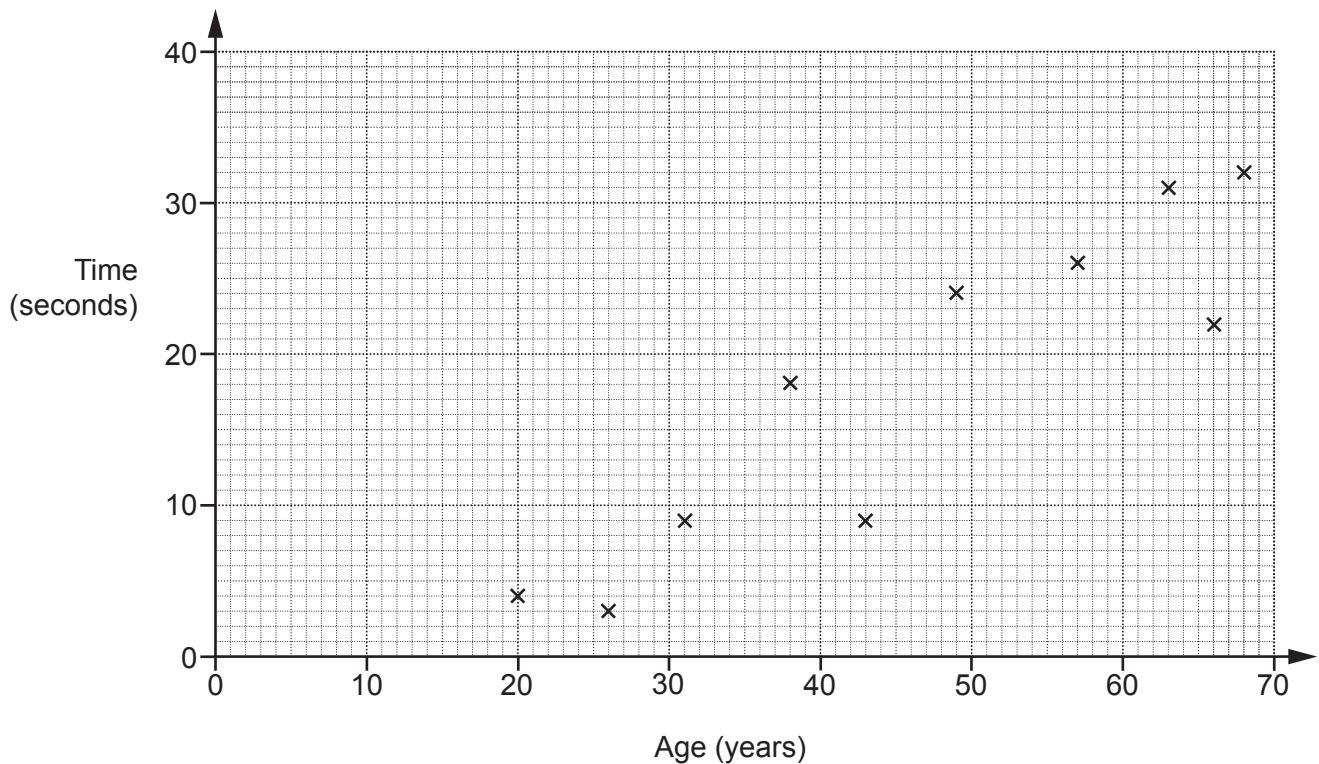
She asks 12 people to complete the puzzle.

She records each person's age and the time taken to complete the puzzle.

- (a)** Make one criticism of Lee's method.

.....
 [1]

This scatter diagram shows the results for ten of the people in Lee's experiment.



- (b)** Here are the other two results.

Age (years)	47	60
Time (seconds)	21	34

Plot these results on the scatter diagram.

[2]

- (c)** What type of correlation is shown in the scatter diagram?

(c) [1]

- (d) Estimate the time it would take a person aged 35 to complete the puzzle.
Show your working to justify your answer.

(d) [2]

- (e) Lee says that at least 80% of the 12 people completed the puzzle in under 30 seconds.

Is Lee correct?

Show working to support your answer.

..... [3]