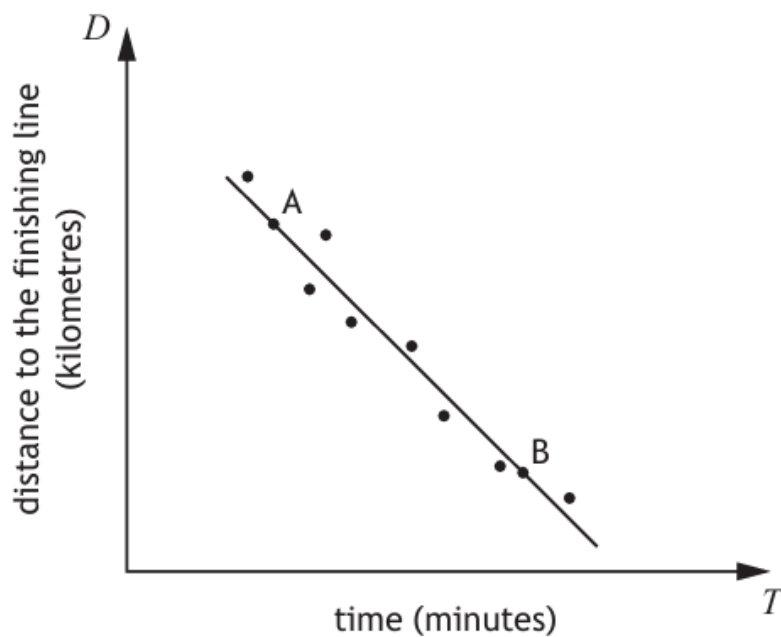


In a car rally, competitors start at different times.

The scattergraph shows the relationship between the length of time they have been driving, T minutes, and the distance to the finishing line, D kilometres.



A line of best fit has been drawn.

Point A represents a competitor who has been driving for 3 minutes and is 26 kilometres from the finishing line.

Point B represents a competitor who has been driving for 10 minutes and is 12 kilometres from the finishing line.

(a) Find the equation of the line of best fit in terms of D and T .

Give the equation in its simplest form.

3

Another competitor has been driving for 7 minutes.

(b) Use your equation from part (a) to estimate the distance the competitor is from the finishing line.

1

Answers: (a) $D = -2T + 32$ or equivalent (b) 18 km