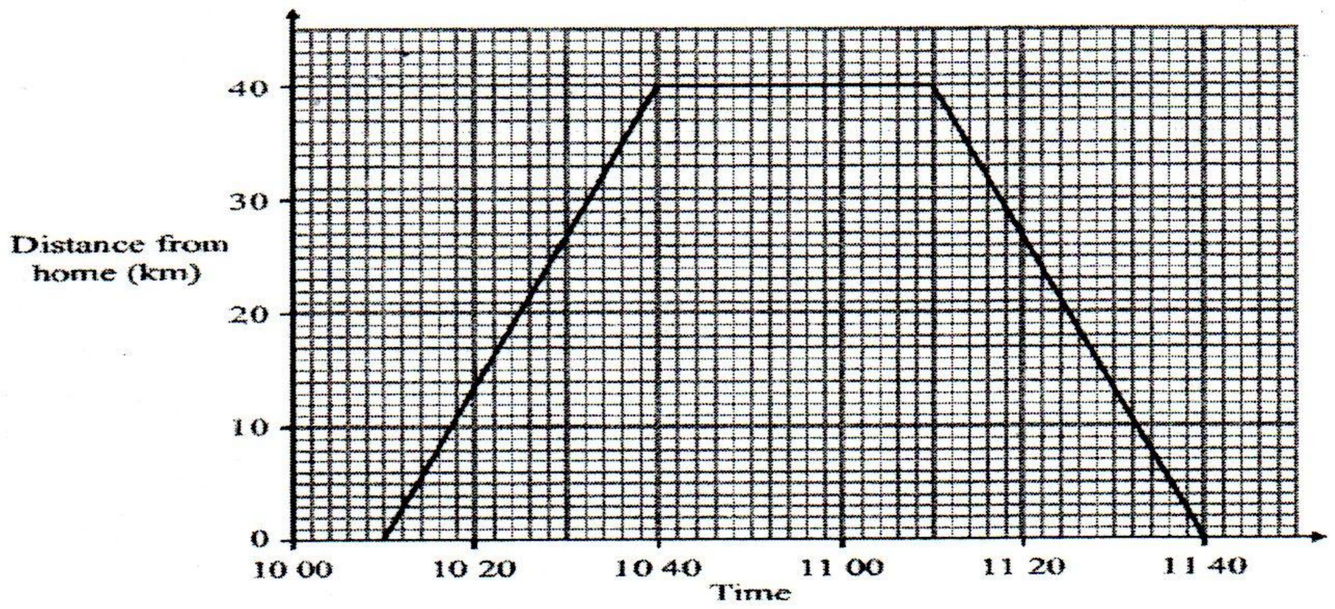
Time and distance graph

Q1. Nigel travelled from his home to his friend's house 40 km away.
Nigel stayed for some time at his friend's house before returning home.
Here is a distance-time graph for Nigel's journey.

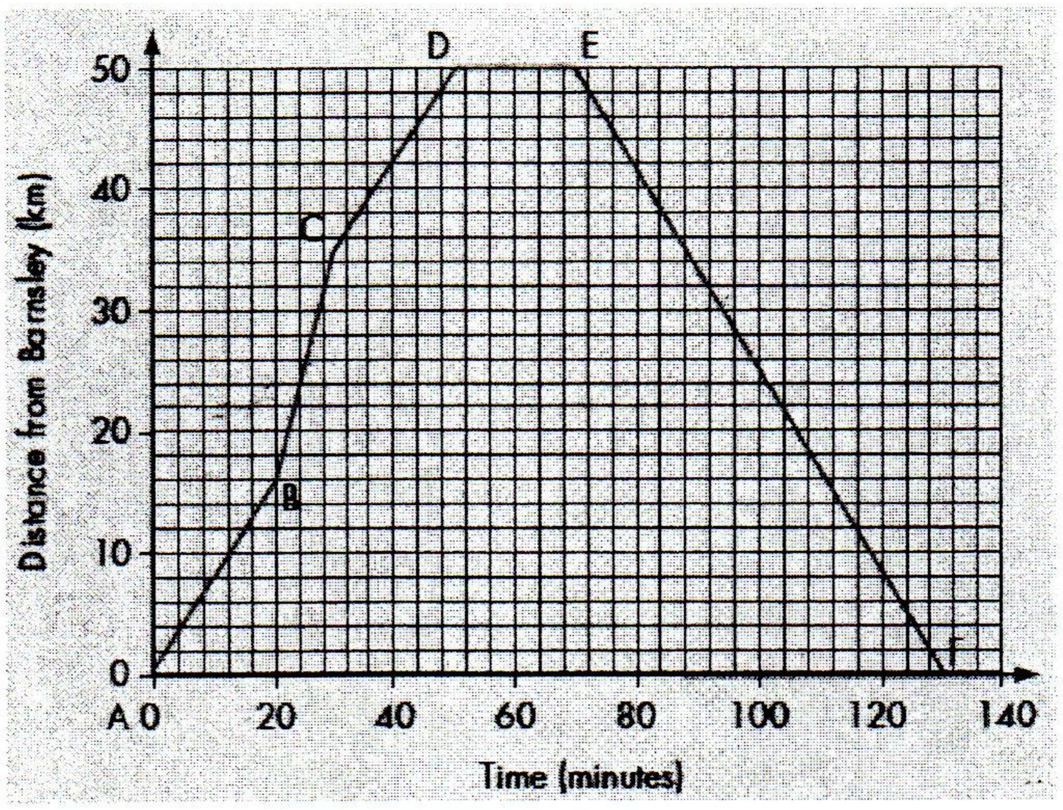


(a) At what time did Nigel leave home? .....

(b) How far was Nigel from home at 10 20? ..... km

(c) How many minutes did Nigel spend at his friend's house?
..... minutes

Q2. The distance–time graph below represents a car journey from Barnsley to Nottingham, a distance of 50 km, and back again.

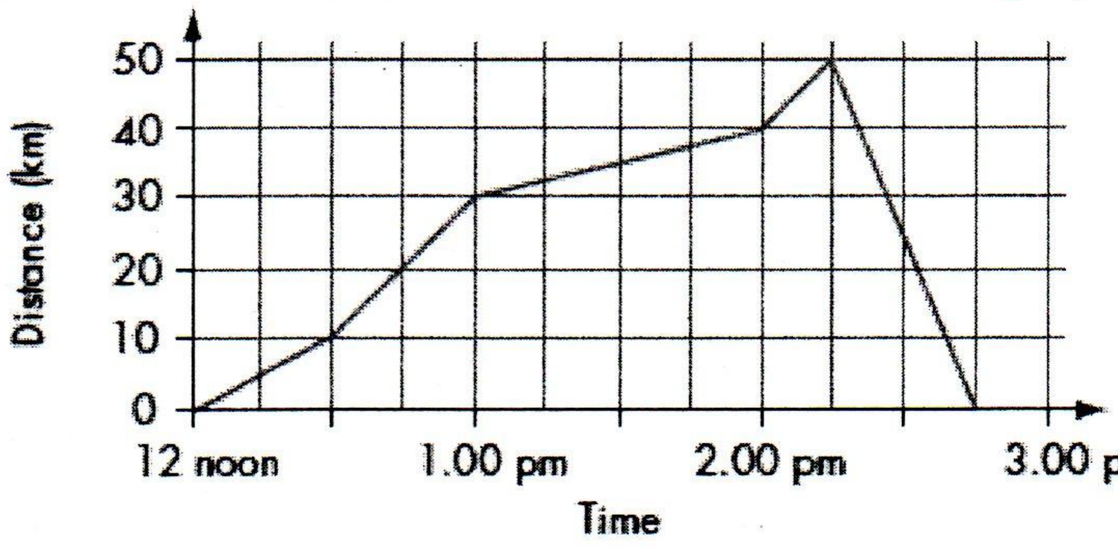


a What can you say about points B, C and D?

b What can you say about the journey from D to F?

c Work out the average speed for each of the five stages of the journey.

Q3. A small bus set off from Leeds to pick up Mike and his family. It then went on to pick up Mike's parents and grandparents. It then travelled further, dropping them all off at a hotel. The bus then went on a further 10 km to pick up another party and took them back to Leeds. This distance–time graph illustrates the journey.



a How far from Leeds did Mike's parents and grandparents live? _____

b How far from Leeds is the hotel at which they all stayed? _____

c What was the average speed of the bus on its way back to Leeds? _____

Q4. Here is part of a train timetable for six trains from Birmingham to London.

Train	A	B	C	D	E	F
Birmingham	06 35	07 00	07 15	07 30	07 45	08 00
London	08 09	08 39	08 48	09 04	09 59	09 39

(a) Which train takes more than 2 hours to go from Birmingham to London? _____

(b) Work out the number of **minutes** taken by train **D** to go from Birmingham to London. ..... minutes

Paula has to go to a meeting in London. She will catch one of the six trains from Birmingham. She needs to arrive in London before 09 00
(c) Write down the latest train that she can catch. _____

Q5.The table shows part of a bus timetable from Shotton to Alton.

Shotton	07 30	08 00	09 00	10 00	11 00
Crook	07 45	08 15	09 15	10 15	11 15
Prudhoe	07 58	08 28	09 28	10 28	11 28
Hexham	08 15	08 45	09 45	10 45	11 45
Alton	08 30	09 00	10 00	11 00	12 00

A bus leaves Shotton at 07 30
(a) What time should it arrive at Alton? .....

Another bus leaves Prudhoe at 08 28
(b) How many minutes should it take to get to Hexham?..... minutes

Serena lives in Crook. She has to be in Hexham by quarter past 11
(c) What is the time of the latest bus she can catch from Crook to arrive in Hexham by quarter past 11? .....