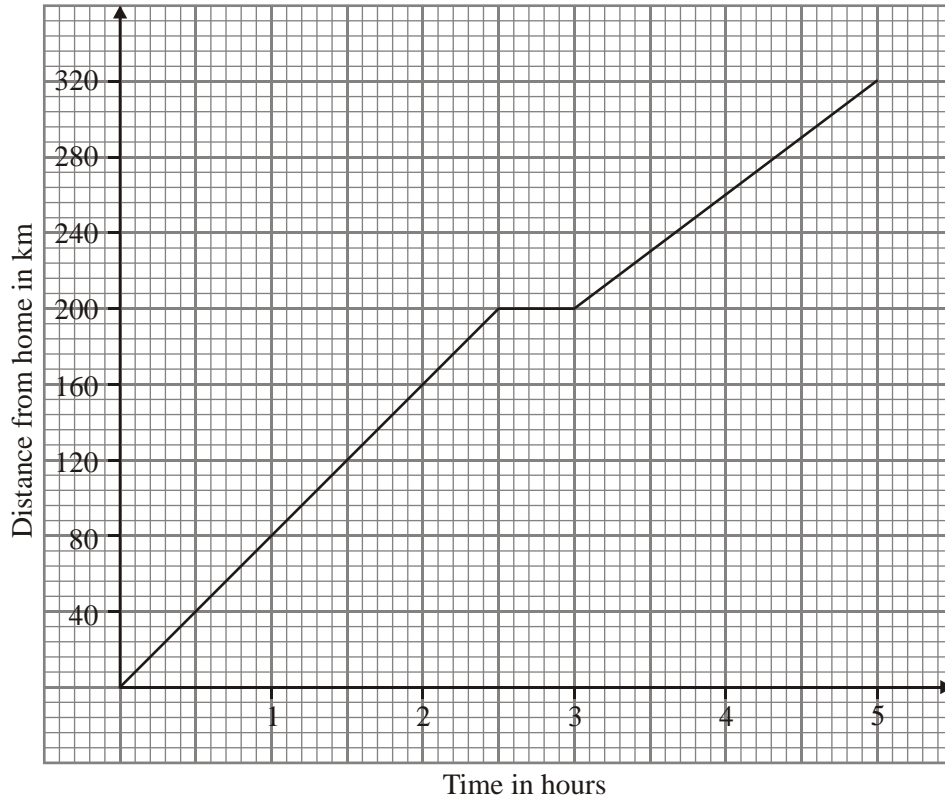


Distance Time Graphs

20 marks

1. Jane drove 320 km from her home to the airport.
The travel graph shows Jane's journey.



During the journey, Jane stopped for lunch.

(a) (i) For how long did Jane stop for lunch?

(ii) How far had Jane travelled in the first 90 minutes?

..... km

(2)

(b) Work out the steady speed that Jane travelled at after lunch.

..... km/h

(2)

Jane's car uses 1 gallon of petrol for each 40 miles.
A gallon of petrol costs £3.20

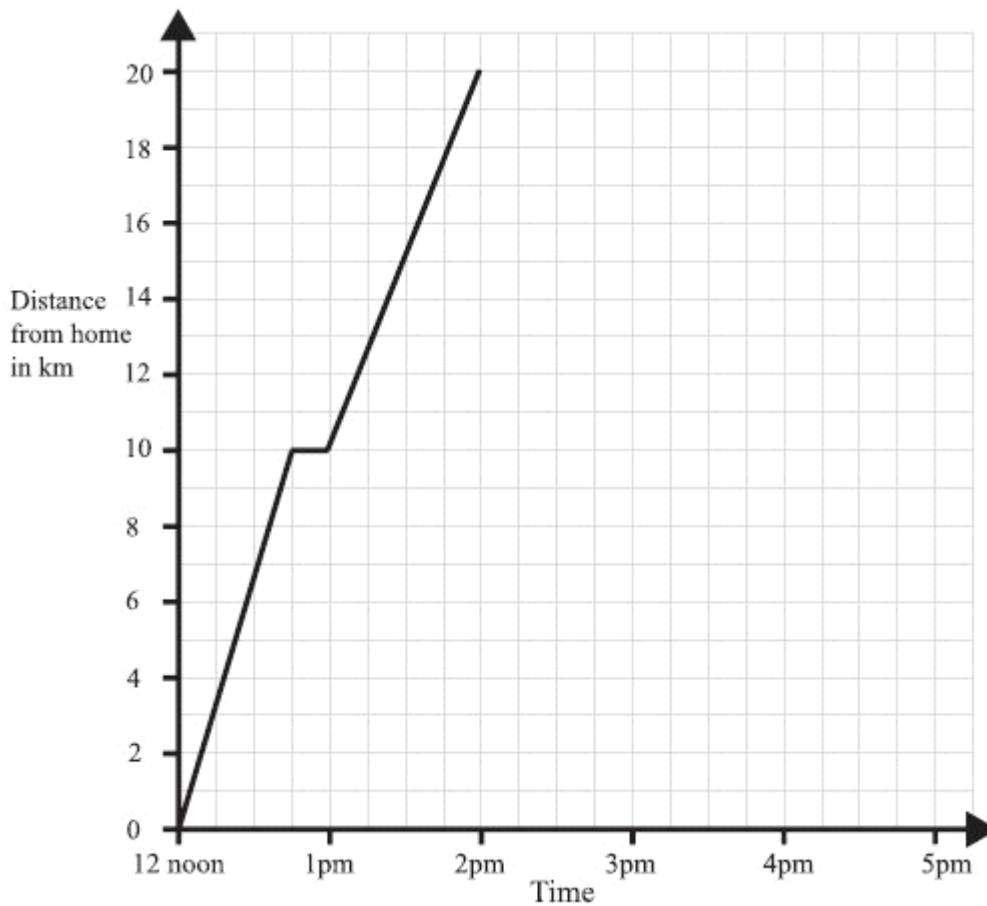
(c) Work out the cost of petrol for Jane's 320 km journey.

£

(4)

(Total 8 marks)

2. A man left home at 12 noon to go for a cycle ride.
The travel graph represents part of the man's journey.



At 12.45pm the man stopped for a rest.

- (a) For how many minutes did he rest?

.....minutes

(1)

- (b) Find his distance from home at 1.30pm.

.....km

(1)

The man stopped for another rest at 2pm.

He rested for one hour.

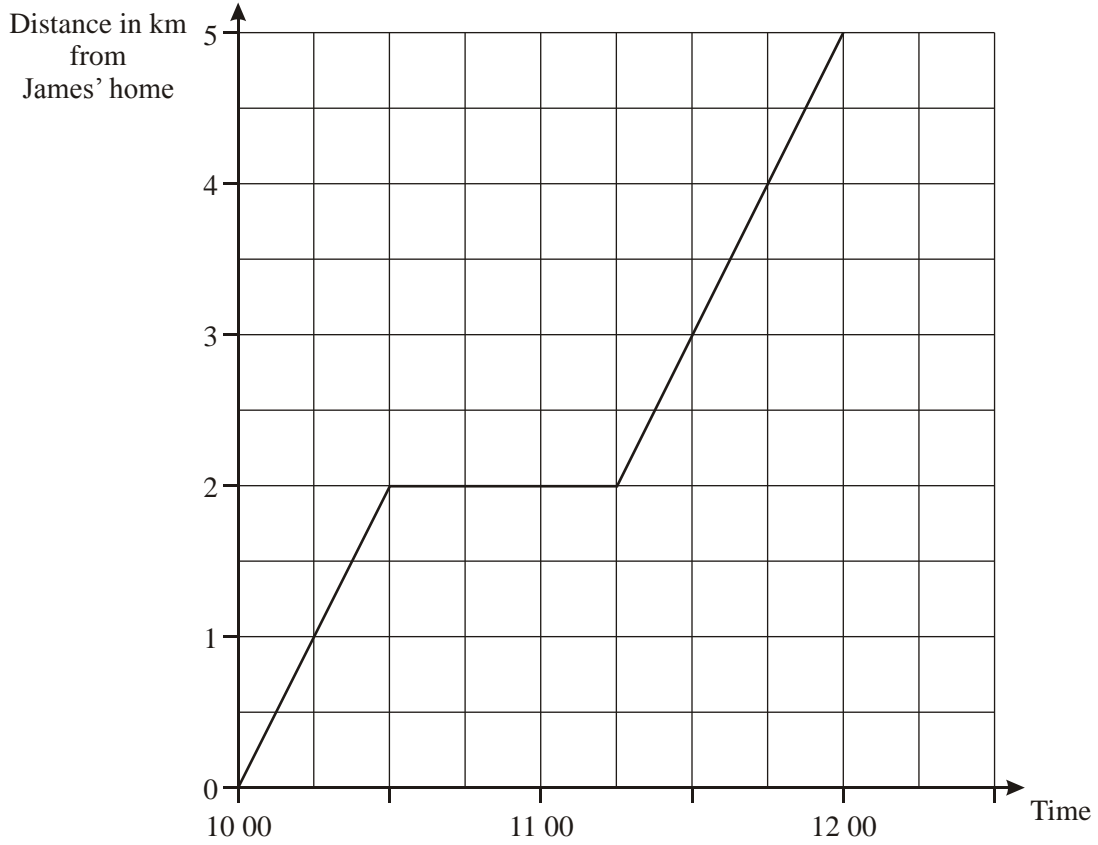
Then he cycled home at a steady speed. It took him 2 hours.

- (c) Complete the travel graph.

(2)
(Total 4 marks)

3. James left home at 10 00 am.
 He walked to the swimming pool.
 On the way to the swimming pool he stopped to talk to a friend.

Here is the distance-time graph for his complete journey.



- (a) For how many minutes did James stop and talk to his friend?

..... minutes

(1)

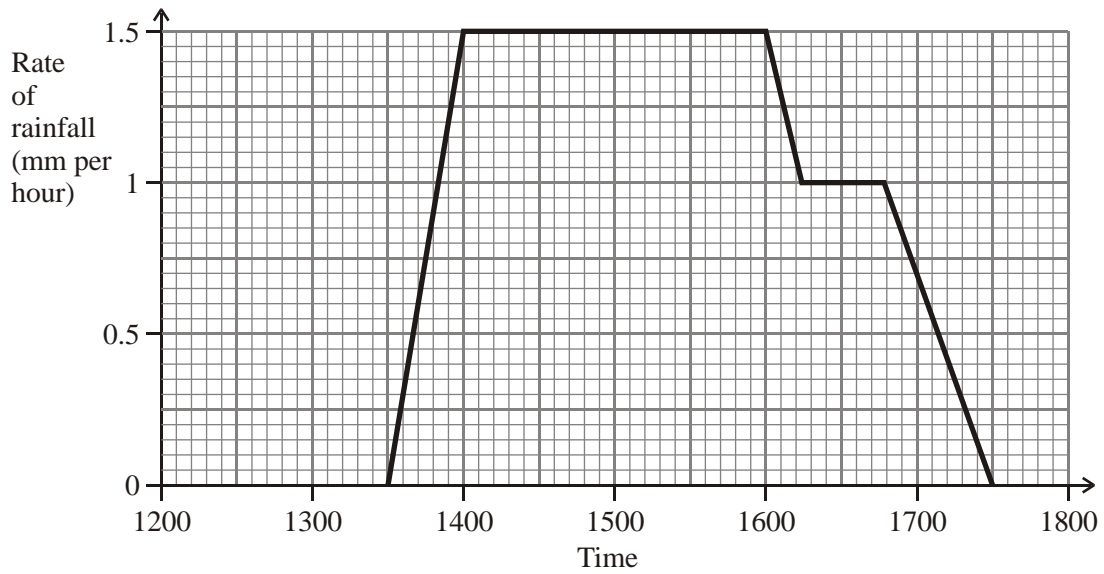
- (b) What is the distance from James' home to the swimming pool?

..... km

(1)

(Total 2 marks)

4. The graph shows the rate of rainfall, in mm per hour, one afternoon last year.



(a) At what time did it start to rain?

.....

(1)

(b) What was the rate of rainfall at 1700?

..... mm per hour

(1)

(c) What happened to the rate of rainfall between 1600 and 1615?

.....

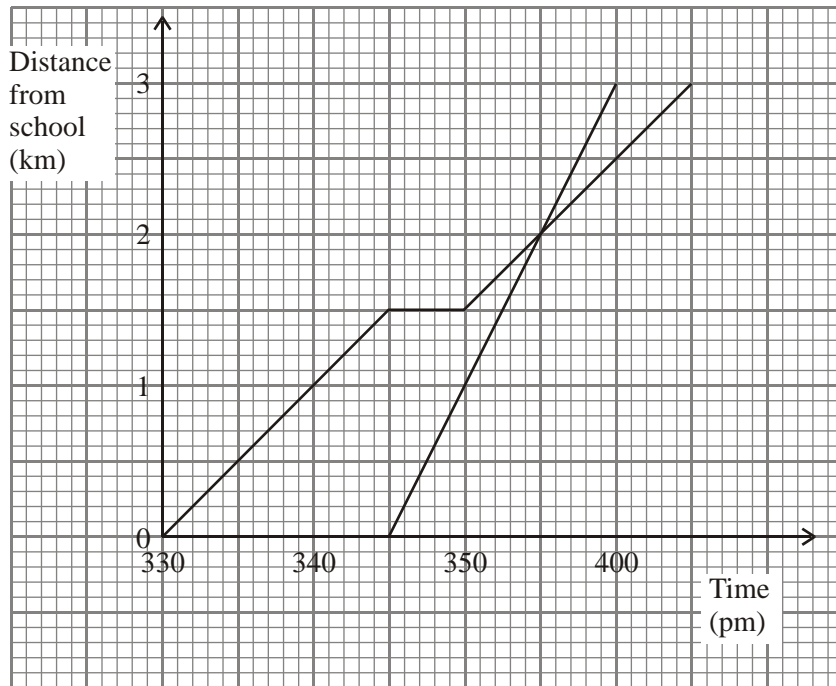
(1)

(Total 3 marks)

5. Robert left school at 3 30 pm.
 He walked home.
 On the way home, he stopped to talk to a friend.

His sister, Sarah, left the same school at 3 45 pm.
 She cycled home using the same route as Robert.

Here are the distance-time graphs for Robert's and Sarah's complete journeys.



- (a) Find the distance Robert walked during the first 10 minutes of his journey.

..... km (1)

- (b) Find the total time that Robert stopped to talk to his friend.

..... minutes (1)

- (c) Write down the distance that Robert had walked when Sarah cycled past him.

..... km (1)
 (Total 3 marks)