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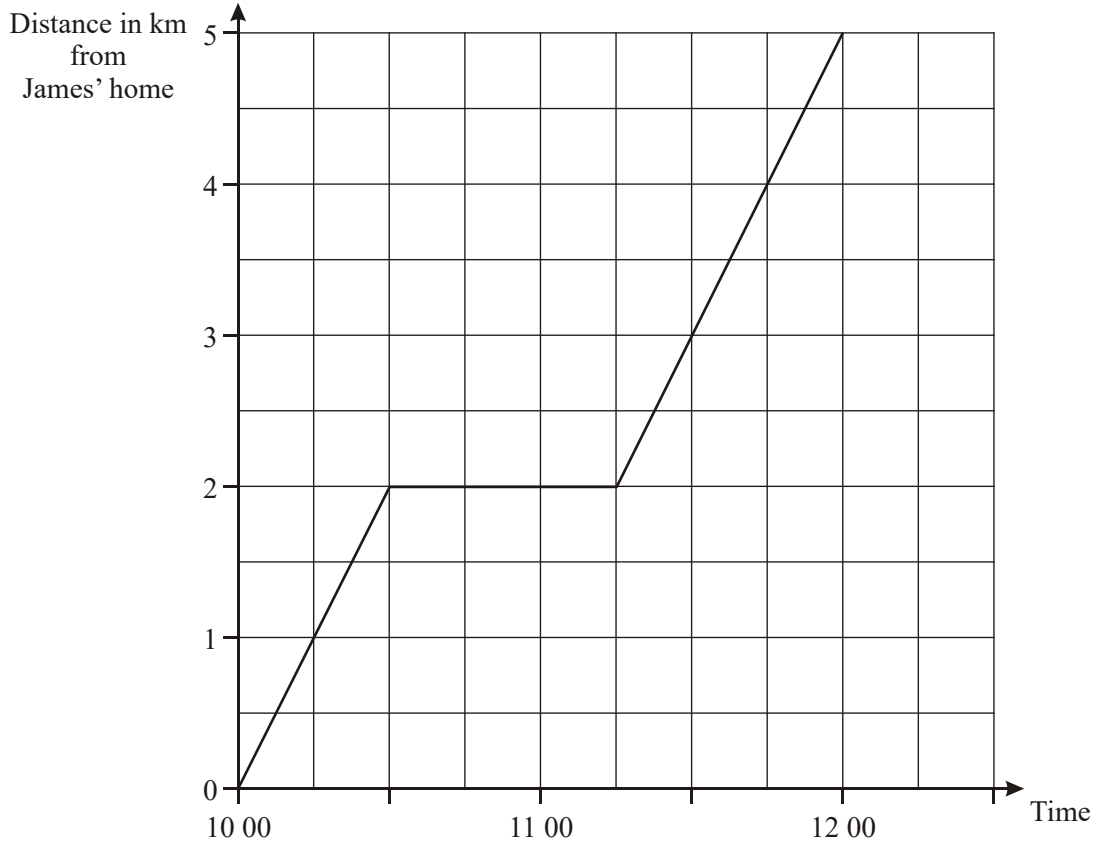He walked to the swimming pool.
On the way to the swimming pool he stopped to talk to a friend.

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

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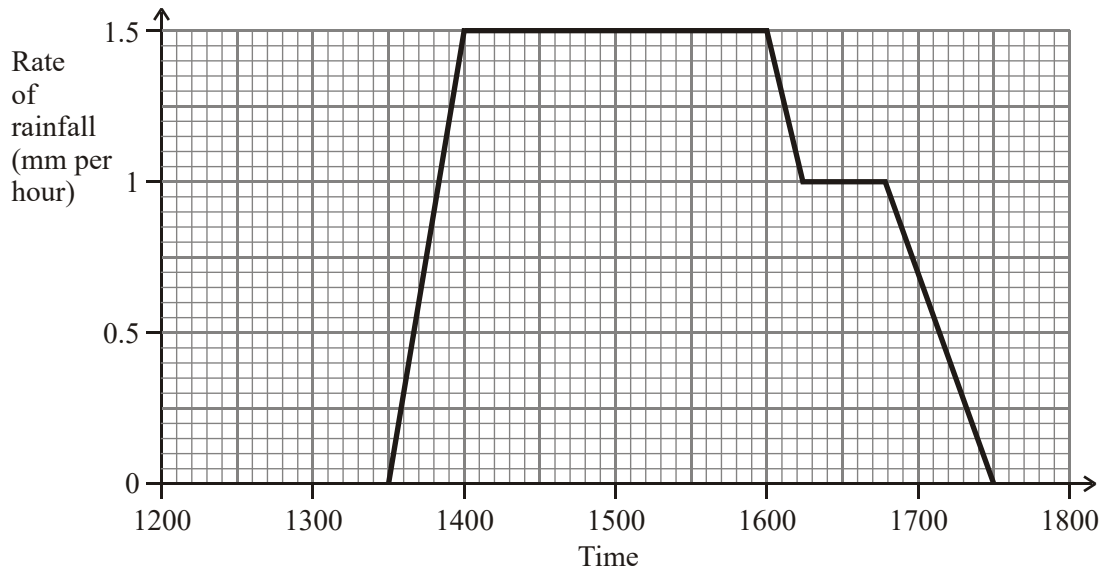
………………………… minutes

(1)

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

…………………… km

(1)
(Total 2 marks)

2.   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?
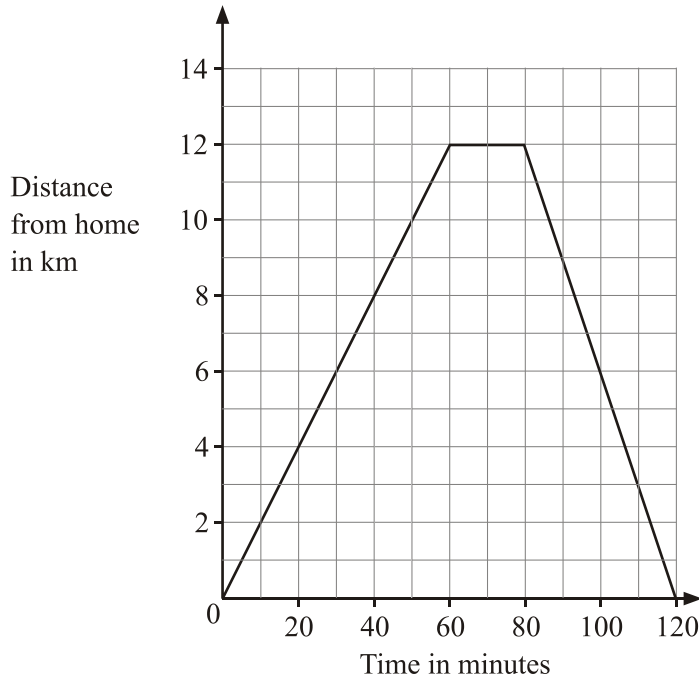
………………….. mm per hour

(1)

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

……………………………………………………………………...........

(1)
(Total 3 marks)

3.   Margaret went on a cycle ride.
The travel graph shows Margaret's distance from home on this cycle ride.

(a)   How far had Margaret cycled after 30 minutes?

.... km

(1)

After 60 minutes, Margaret stopped for a rest.

(b)   For how many minutes did she rest?

.... minutes

(1)

(c)   How far did Margaret cycle in total on her ride?

.... km

(1)
(Total 3 marks)

4. 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.
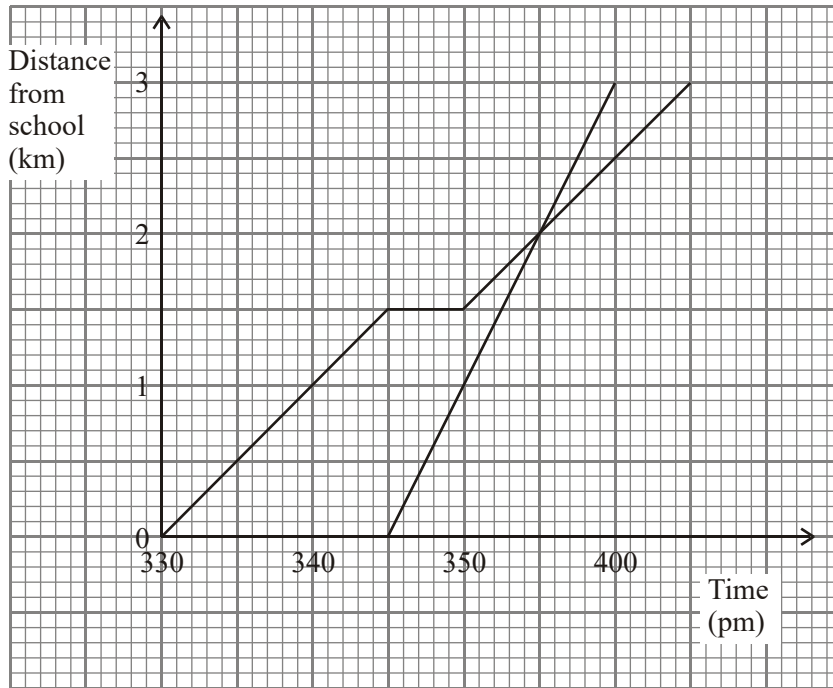
(a) Find the distance Robert walked during the first 10 minutes of his journey.

.... 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)

5.   Pete visited his friend and then returned home.
The travel graph shows some information about Pete's journey.
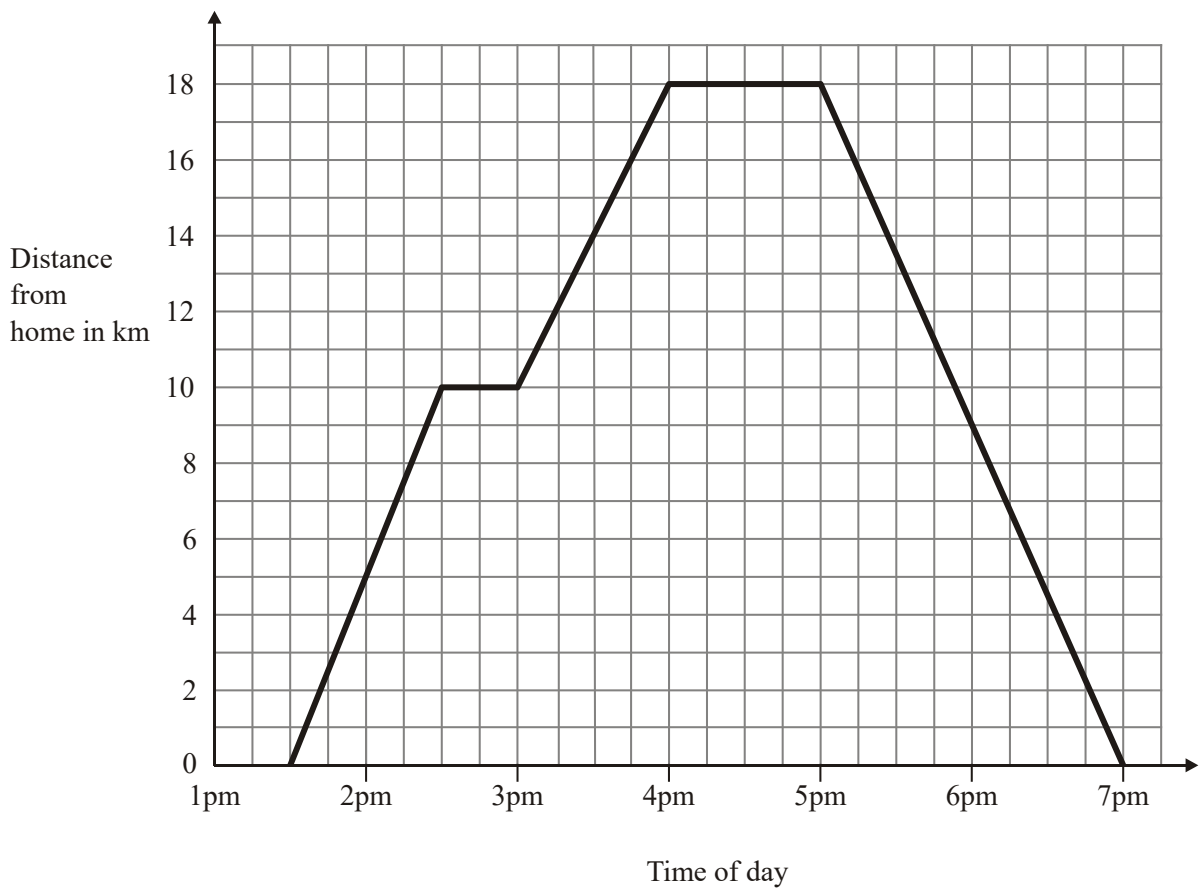
(a)   Write down the time that Pete started his journey.

....

(1)

At 2.30 pm Pete stopped for a rest.

(b)   (i)   Find his distance from home when he stopped for this rest.

.... km

(ii)   How many minutes was this rest?

.... minutes

(2)

Pete stayed with his friend for one hour.
He then returned home.

(c)   Work out the total distance travelled by Pete on this journey.

.... km
(2)
(Total 5 marks)

1.   (a)   6   1
          B1 cao

        (b)   20   1
          B1 cao

        (c)   24   1
          B1 cao

[3]

2.   (a)   45   1
          B1 cao

        (b)   5   1
          B1 cao

[2]

3.   (a)   1330   1

B1 for 1330 or 1.30pm

(b)   0.65   1

B1 for 0.65 (accept 0.6 < rate < 0.7)

(c)   Rain slowed oe   1

B1 for description (eg. Rain slowed, got less heavy, dropped from 1.5 to 1)

[3]

4.   1 km
5 mins
2 km   3

B1 cao
B1 cao
B1 cao

[3]

5   (a)   1.30 pm   1

B1 cao

(b)   10 km   2

B1 cao

(c)   30 mins   1

B1 cao

(d)   18 + 18
36   2

B2 for 36 km
(B1 for 18 alone or 18 + 18 oe)

[5]

1.   Most candidates found this question very straightforward and scored well. 30 and 60 appeared as answers to part (a) occasionally.

2.   Very few candidates failed to score at least 1 mark and many gained full marks. In part (a) the usual incorrect answer was 1350 or 1.30 without any indication of pm. In part (b) failure to read the scale on the vertical axis resulted in several errors being made. Readings of 0.6 or 0.7 or 0.53 were often seen. In part (c) the shape of the graph often dictated a candidates interpretation rather than the actual time scale, with many trying to explain the horizontal line.

3. The first two parts of this question were answered very well indeed. Slightly fewer candidates were successful in part (c). The most common incorrect answer was 12 kilometres, which resulted from candidates failing to include both parts of the journey.

4. All three parts of this question were very well answered indeed by over 80% of candidates. Only part (c), to which a common response was either 1 or 1.5, lost marks for a few.

5. Parts (a) and (b) were well answered, though in part (a) some candidates gave the answer using incorrect time notation. In part the majority of candidates earned bull marks, but a sizeable minority demonstrated confusion. Some only gave 18 showing their interpretation of a travel graph was one way, whereas some incorrectly read the figures off as 10 *and* 18, resulting in 28 + 28.