

1. This is part of a bus timetable between **Bury** and **Manchester**.

	Bus 1	Bus 2	...			
Bury	08 25	08 55	09 15	09 30	09 45	10 05
Whitefield	08 34	09 04	09 24	09 39	09 54	10 14
Heaton Park	08 46	09 16	09 36	09 51	10 06	10 27
Cheetham	08 56	09 26	09 46	10 01	10 16	10 37
Manchester	09 05	09 35	09 55	10 10	10 25	10 48

(a) How many minutes should the 08 25 bus take to go from **Bury** to **Manchester**?

$$08:25 \rightarrow 09:05 = 40 \text{ minutes}$$

.....40..... minutes
(1)

Daniel goes from **Whitefield** to **Manchester** by bus.

Daniel takes 17 minutes to get from his house to the bus stop in **Whitefield**.
He takes 15 minutes to get from the bus stop in **Manchester** to work.

Daniel has to get to work by 10 am.
He leaves his house at 8.45 am.

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(b) Does Daniel get to work by 10 am?
You must show all your working.

When does he get to Whitefield?

$$08:45 + 17 \text{ minutes} = 09:02 \quad (1)$$

↑
↑
 leaves home house → bus stop

As he reaches the stop at 09:02, the earliest bus he can catch is at 09:04.
This arrives at Manchester at 09:35 (1)

$$09:35 + 15 \text{ minutes} = 09:50$$

↑
↑
 arrives at Manchester Manchester → work

Which is before 10 am, so yes he does get to work before 10 am. (1)

(3)

(Total for Question is 4 marks)

2. Here is the charge at a car park in Spain.

Car park 0.024 euros per minute

Jon parked his car in this car park.

Jon drove into the car park at 10:45

When he drove out of the car park he had to pay 8.40 euros.

At what time did Jon drive out of the car park?

How many minutes is 8.40 euros?

$$\frac{8.40}{0.024} = 350 \text{ minutes} \quad (1)$$

10:45 + 350 minutes

11:00 + 335 minutes

11:00 + 5 hrs 35 mins

16:00 + 35 minutes

16:35 (1)

$$350 - 15 = 335 \quad (1)$$

$$\frac{335}{60} = 5.58\bar{3} \text{ hours}$$

$$335 - (5 \times 60)$$