



Converting between units of Time

Q1. Convert the following into hours.

- (i) 120 minutes [1 Mark]
- (ii) 270 minutes [1 Mark]
- (iii) 45 minutes [1 Mark]
- (iv) 540 minutes [1 Mark]

Q2. Change the following to minutes

- (i) 3 hours [1 Mark]
- (ii) 4.5 hours [1 Mark]
- (iii) 5 hours 20 minutes [1 Mark]
- (iv) 1 hour 45 minutes [1 Mark]

Q3. Change the following to seconds

- (i) 10 minutes [1 Mark]
- (ii) 2 minutes 40 seconds [1 Mark]
- (iii) 5 minutes 12 seconds [1 Mark]
- (iv) 1 hour [1 Mark]

Converting between the 12 and 24 hour clocks

Q4. Convert the following times to the 24 hour clock:

- (i) 5.30 pm [1 Mark]
- (ii) 12.15 am [1 Mark]
- (iii) 7.45 am [1 Mark]
- (iv) 2.10 pm [1 Mark]

Q5. Convert the following times to the 12 hour clock:

- (i) 18.30 [1 Mark]
- (ii) 11.40 [1 Mark]
- (iii) 03.45 [1 Mark]
- (iv) half-past midnight [1 Mark]



## Problem Solving

Q6. A TV show starts at 8.30pm.

The show lasts 50 minutes, and has a 5 minute break in the middle for adverts.

When time does the show end?

[2 Marks]

Q7. A pop concert lasts 2 hours 35 minutes. If it finished at 10 minutes past midnight, what time did it start?

Give your answer using the 24 hour clock.

[2 Marks]

Q8. Roy sets off from his home at 11.00 for a walk.

He walks for 75 minutes and then has lunch at a café for 45 minutes.

He then leaves and has a 10 minute bus journey back home.

What time does he arrive home?

[3 Marks]

Q9. Jessica wants to catch a plane at the airport.

The scheduled flight time of the plane is at 18.40.

She sets off from her home at 13.50 and has a 25 minute journey by taxi to the train station.

The train then takes 2 hours 30 minutes to get to the airport.

Given that she must arrive at least two hours before the scheduled flight time, will Jessica arrive in time at the airport?

[3 Marks]

## Problems using Bus and Train Timetables

Q10. Here is part of a train timetable:

Ilkley	0720	0750	0820	0850
Menston	0735	-	-	0905
Guisley	0745	0815	-	-
Kirkstall	0755	0825	0846	0919
Leeds	0803	0836	0857	0927

a) Paul arrives at Guiseley station at 8.00am and catches the first train to Leeds. What time does he arrive in Leeds?

[1 Mark]

b) Ron arrives at Kirkstall station at 0756. How long does he have to wait for the next train?

[1 Mark]



c) Sarah travels from Menston to Kirkstall by train for a meeting at the office where she works. The meeting will take place at 8.50 am. It will take her 5 minutes to walk from the station to the office. Which train should she get from Menston?

[2 Marks]

d) What is the time difference between the quickest and slowest train from Guiseley to Leeds?

[2 Marks]

Q11. Here is part of bus timetable:

<b>Axbridge</b>	0845	0856	0908
<b>Benton</b>	0900	-	0923
<b>Char</b>	0912	0919	0928
<b>Drayton</b>	0928	0934	0944
<b>Eccles</b>	0942	0950	0958
<b>Fenton</b>	0958	1009	-
<b>Casterbridge</b>	1006	1017	1024
<b>Glen Moore</b>	1017	1029	1033
<b>Havering</b>	1028	1040	1045

a) How long should the 0934 from Drayton take to get to Glen Moore?

[1 Mark]

b) Simon arrives at Benton at 0910. He gets the next train to Eccles. From Eccles station he walks 15 minutes to work. What time does he arrive at work?

[2 Marks]

c) Roger wants to get to a conference meeting in Casterbridge which starts at 11.00am. It takes him 21 minutes to walk from his house to the train station in Char.

It then takes him 35 minutes to walk from Casterbridge train station to the conference hall.

He sets off from his house at 8.53 am.

Will he make it to the meeting on time?

You must show all your working.

[3 Marks]