



- 1** A digital clock shows 15:40.
- Write this time using the 12-hour clock with am or pm.
 - Write 8:15 pm in 24-hour time.

(2 marks)

a)

$$15 - 12 = 3$$

3:40 pm

b)

$$8 + 12 = 20$$

20:15

- 2** On a clock the minute hand points at the 9. The hour hand is between the 2 and the 3. Write down the time in digital form.

(1 mark)

minute hand at 9 = 45 minutes

hour hand has passed 2

2:45

- 3** Work out the number of days in 3 weeks.

(1 mark)

There are 7 days in 1 week

$$3 \times 7 = 21 \text{ days}$$

21

- 4** Change 240 minutes into hours.

(1 mark)

There are 60 minutes in 1 hour

$$240 \div 60 = 4 \text{ hours}$$

4

- 5 Change $2\frac{3}{4}$ hours into minutes.

(1 mark)

$$2 \text{ hours} = 2 \times 60 = 120 \text{ minutes}$$

$$\frac{3}{4} \text{ of an hour} = 45 \text{ minutes}$$

$$120 + 45 = 165 \text{ minutes}$$

165

- 6 A film starts at 19:35 and lasts 50 minutes.

Write down the time the film finishes.

(1 mark)

$$19:35 + 25 \text{ minutes} = 20:00$$

$$20:00 + 25 \text{ minutes} = 20:25$$

The film finishes at 20:25

20:25

- 7 Change 380 minutes into hours and minutes.

(2 marks)

$$6 \text{ hours} = 6 \times 60 = 360 \text{ minutes}$$

$$380 - 360 = 20 \text{ minutes}$$

$$380 \text{ minutes} = 6 \text{ hours } 20 \text{ minutes}$$

6 hours 20 minutes

- 8 A delivery van leaves a depot at 10:47 and arrives at a warehouse at 13:12 on the same day.

Work out the length of the journey in minutes.

(2 marks)

From 10:47 to 11:00 is 13 minutes

From 11

00 to 13:00 is 2 hours = 120 minutes

From 13:00 to 13:12 is 12 minutes

$$13 + 120 + 12 = 145 \text{ minutes}$$

145

9

A film starts at 19:35 and lasts 1 hour 50 minutes.

At what time does the film finish? Give your answer using the 12-hour clock with am or pm.

(2 marks)

$$19:35 + 1 \text{ h} = 20:35$$

$$20:35 + 50 \text{ min} = 21:25$$

$$21 - 12 = 9$$

9:25 pm

10

Here is part of a train timetable.

Station	Leeds	Wakefield	Doncaster	Sheffield
Time	09:15	09:32	09:58	10:21

a. How many minutes does the train take to go from Wakefield to Sheffield?

b. How long does the train take to go from Leeds to Sheffield? Give your answer in hours and minutes.

(3 marks)

a)

$$09:32 \text{ to } 10:00 = 28 \text{ min}$$

$$10:00 \text{ to } 10:21 = 21 \text{ min}$$

$$28 + 21 = 49$$

49 minutes

b)

$$09:15 \text{ to } 10:15 = 1 \text{ h}$$

$$10:15 \text{ to } 10:21 = 6 \text{ min}$$

1 hour 6 minutes

11

Aisha finished a swimming session at 16:10.

The session lasted 1 hour 35 minutes.

Work out the time the session started.

(2 marks)

Count back 1 hour from 16:10 to get 15:10

Count back 35 minutes from 15

$$15:10 - 10 \text{ minutes} = 15:00, \text{ then } 15:00 - 25 \text{ minutes} = 14:35$$

Check

$$14:35 + 1 \text{ hour } 35 \text{ minutes} = 16:10$$

14:35

12

Priya leaves her office at 17:26.

It takes her 18 minutes to walk to the bus station.

Her bus leaves the bus station at 17:40.

Does Priya catch the bus? You must show your working.

(3 marks)

$$17:26 + 18 \text{ minutes} = 17:44$$

The bus leaves at 17:40

17:44 is after 17:40, so Priya misses the bus by 4 minutes

13

Here is part of a train timetable.

Station	Bristol	Bath	Swindon	Reading
Time	14:10	14:28	14:55	15:30

The train leaves Bristol 12 minutes late and the rest of the journey takes the usual time.

a. At what time does the train arrive in Reading?

b. Maya is meeting a friend at Reading at 15:35. Will the train arrive before 15:35? Give a reason.

(3 marks)

a)

$$15:30 + 12 \text{ min} = 15:42$$

15:42

b)

15:42 is after 15:35

No

14

Here is part of a bus timetable.

Bus station	08:05	08:35	09:05	09:35
Library	08:17	08:47	09:17	09:47
Hospital	08:31	09:01	09:31	10:01

- a. Dev needs to get to the hospital by 09:15. What is the latest bus he can catch from the bus station?
- b. How many minutes does the journey from the bus station to the hospital take?
- c. Dev gets to the bus station at 08:50. How many minutes must he wait for the next bus?

(4 marks)

a)

08:35 bus arrives 09:01 - before 09:15

09:05 bus arrives 09:31 - too late

08:35 bus

b)

08:05 to 08:31 = 26 min

26 minutes

c)

08:50 to 09:05 = 15 min

15 minutes

15

Marco practises the guitar for 45 minutes on each of Monday, Tuesday, Wednesday, Thursday and Friday.

Work out the total time Marco practises in the week.

Give your answer in hours.

(3 marks)

$$5 \times 45 = 225 \text{ minutes}$$

$$225 \div 60 = 3.75$$

Total practice time is 3.75 hours (3 hours 45 minutes)

3.75

16 Lena drives from her home to her sister's house.

She leaves home at 08:50.

She drives for 1 hour 48 minutes, stops for a 25 minute break, then drives for another 2 hours 37 minutes.

- Work out the time Lena arrives at her sister's house.
- Lena wants to arrive before 14:00. Does she succeed? Give a reason.

(4 marks)

Total journey time

$$1 \text{ h } 48 \text{ min} + 25 \text{ min} = 2 \text{ h } 13 \text{ min}, \text{ then } 2 \text{ h } 13 \text{ min} + 2 \text{ h } 37 \text{ min} = 4 \text{ h } 50 \text{ min}$$

$$08:50 + 4 \text{ hours} = 12:50$$

$$12:50 + 50 \text{ minutes} = 13:40, \text{ so she arrives at } 13:40$$

13:40 is before 14:00, so yes - she arrives with 20 minutes to spare

17 Here is part of a train timetable from Ashville to Redmoor.

	Train A	Train B	Train C
Ashville (depart)	08:35	09:05	09:40
Redmoor (arrive)	09:42	10:08	10:51

Maya has a meeting in Redmoor at 10:15.

It takes her 12 minutes to walk from Redmoor station to the meeting.

- Which is the latest train Maya can catch from Ashville to be at the meeting on time?
- How many minutes early for the meeting will she be?

(5 marks)

Train B arrives at 10

$$08. 10:08 + 12 \text{ minutes} = 10:20, \text{ which is after } 10:15, \text{ so Train B is too late}$$

Train A arrives at 09

$$42. 09:42 + 12 \text{ minutes} = 09:54, \text{ which is before } 10:15, \text{ so Train A works}$$

The latest suitable train is Train A, departing 08:35

From 09:54 to 10:15 is 21 minutes, so she is 21 minutes early