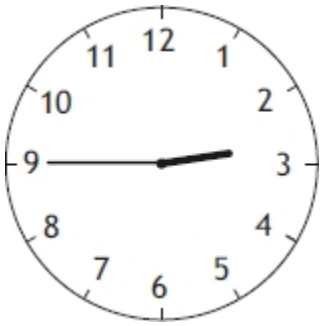
1 A clock shows this time twice a day.



Tick the two digital clocks that show this time.

03:45	02:45	09:45
21:45	14:45	

1 mark

2 William wants to travel to Paris by train.

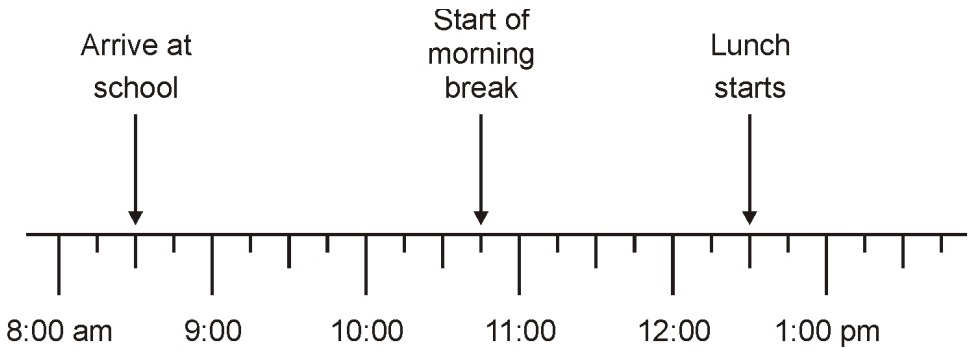
He needs to arrive in Paris by **5:30 pm**.

Circle the **latest time** that William can leave London.

Leaves London	Arrives Paris
12:01	15:22
12:25	15:56
13:31	16:53
14:01	17:26
14:31	17:53
15:31	18:53
16:01	19:20

1 mark

3 Jamie makes a time line of part of his day.



What time does Jamie's morning break start?

am

1 mark

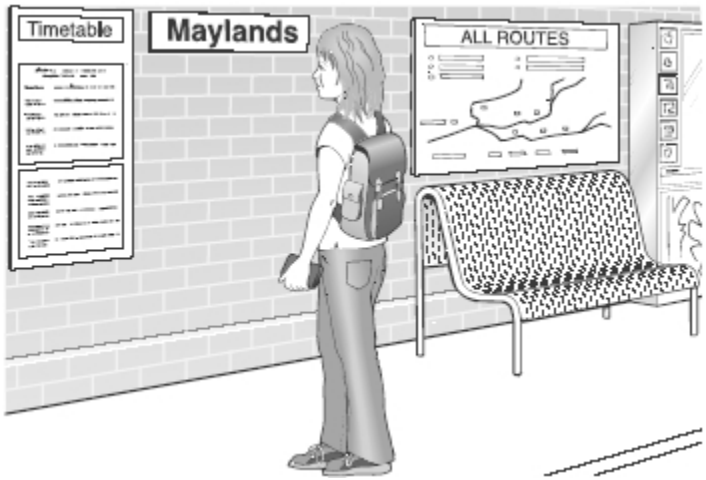
Lunch lasts for three-quarters of an hour.

What time does lunch **finish**?

pm

1 mark

4



Here is part of the morning train timetable from Perth to Midland in Australia.

Perth	07:11	07:20	07:27	07:35	07:43	07:55
Maylands	–	07:28	07:33	07:43	07:49	08:03
Ashfield	–	–	07:38	–	07:54	–
Success Hill	07:25	–	07:41	–	07:57	–
Midland	07:32	07:41	07:48	07:56	08:05	08:16

What time is the first train from Maylands that stops at Success Hill?

:

1 mark

Mr Evans is in Perth and wants to be in Midland by 08:00

What is the time of the **latest** train he can take from Perth?

:

1 mark

5 The table below shows five journeys a taxi driver made one day.

journey number	start time	number of passengers	distance	cost
1	9:15 am	2	8 km	£7.50
2	9:40 am	1	12 km	£9.90
3	10:30 am	3	7 km	£7.60
4	10:50 am	1	21 km	£15.50
5	12:10 pm	4	15 km	£12.00

On journey number 5, the passengers shared the cost equally.

How much did **each** passenger pay?

£

1 mark

How many **passengers** made journeys of more than 10 km?

passengers

1 mark

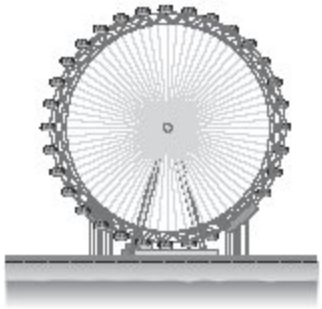
The 12 km journey took 40 minutes.

What time did the taxi finish its journey?

am

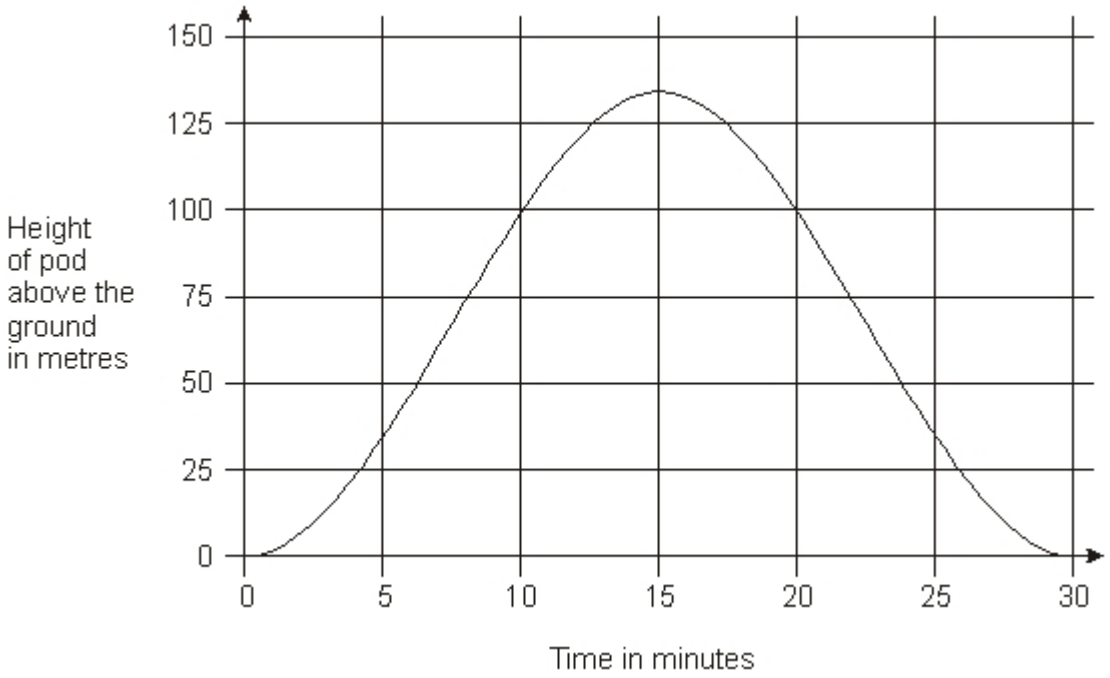
1 mark

6 The London Eye is a big wheel with pods to carry passengers.



It takes 30 minutes for the wheel to make a complete turn.

This graph shows the height of a pod above the ground as the wheel turns.



How long from the start does it take the pod to reach a height of 75 metres?

minutes

1 mark

How many metres above the ground is the pod at its highest point?

m

1 mark

7 Seb has to see the doctor at 10:05 am.

He gets to the doctor's surgery at 9:52 am.

How many minutes **early** is he?

minutes

1 mark

He leaves the doctor's surgery at 10:25 am.

He gets to school 45 minutes later.

What time does he arrive at school?

am

1 mark

8 Stefan's watch shows five minutes past nine.

The watch is twelve minutes fast

What is the correct time?

1 mark

9 What is 444 minutes in hours and minutes?

hours

minutes

1 mark

10 Write the missing numbers.

60 months = ☐ years

72 hours = ☐ days

84 days = ☐ weeks

2 marks

11 Jack finished a sponsored run in 53 minutes 25 seconds.

Ally finished 3 minutes 50 seconds **after** Jack.

How long did Ally take?

☐ **min** ☐ **sec**

1 mark

Layla finished the run 8 minutes 45 seconds **before** Jack.

How long did Layla take?

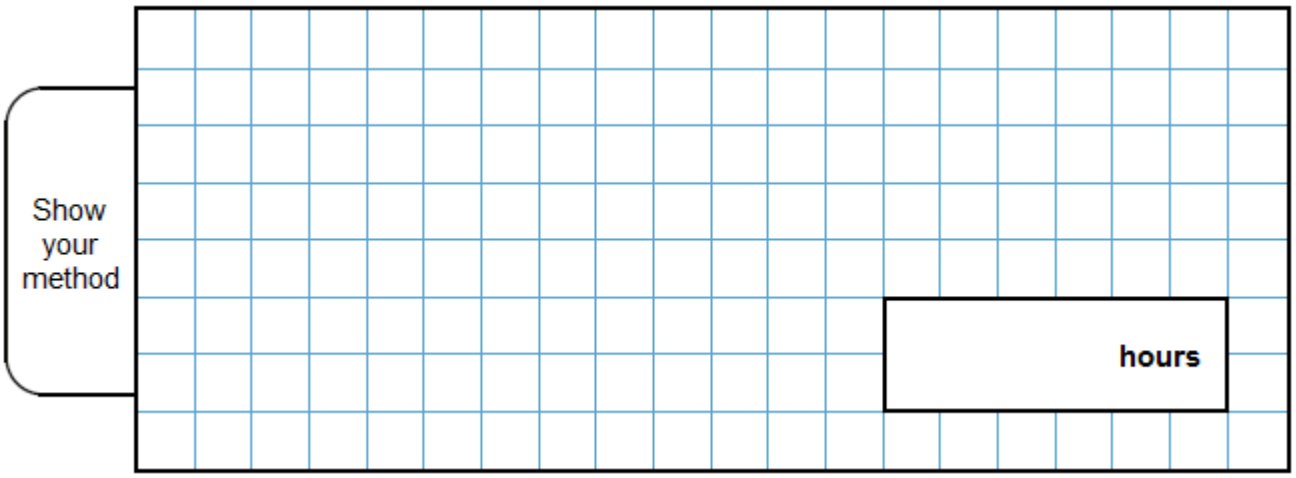
☐ **min** ☐ **sec**

1 mark

12 The length of a day on Earth is 24 hours.

The length of a day on Mercury is $58\frac{2}{3}$ times the length of a day on Earth.

What is the length of a day on Mercury, in **hours**?



2 marks

13 Here is a rule for the time it takes to cook a chicken.

Cooking time = 20 minutes plus an extra 40 minutes for each kilogram

How many minutes will it take to cook a 3 kg chicken?

minutes

1 mark

What is the mass of a chicken that takes 100 minutes to cook?

kg

1 mark

14

How many **days** old will the baby be when she has lived for **one million seconds**?

Show your method

days

2 marks

Mark schemes

1 Both clocks ticked, as shown:

Accept alternative unambiguous positive indications, e.g. clocks circled or underlined.

[1]

2 The correct time circled as shown:

Leaves London	Arrives Paris
12:01	15:22
12:25	15:56
13:31	16:53
14:01	17:26
14:31	17:53
15:31	18:53
16:01	19:20

Accept alternative unambiguous positive indications, e.g. 14:01 ticked or underlined.

Accept 17:26 circled in addition to 14:01, provided no other time is circled.

***Do not** accept only the arrival time 17:26 circled.*

[1]

3 (a) 10:45 am

The answer is a specific time (see General guidance: responses involving time for guidance).

1

(b) 1:15 pm

The answer is a specific time (see General guidance: responses involving time for guidance).

1

[2]

4 (a) 07:33

The answer is a specific time.

1

(b) 07:35

The answer is a specific time.

1

[2]

5 (a) £3.00

1

(b) 6

1

(c) 10:20 am

The answer is a specific time.

1

[3]

6 (a) Answer in the range 7.5 minutes to 9 minutes exclusive.

Accept an answer in the range 21 minutes to 22.5 minutes exclusive.

1

(b) Answer in the range 130 m to 140 m inclusive.

1

[2]

7 13

The answer is a time interval

1

11:10

The answer is a specific time

1

[2]

8 7 minutes to 9 **OR** 8:53

[1]

9 7 hours and 24 minutes

[1]

10 Award **TWO** marks for three boxes completed correctly as shown:

60 months = 5 years

72 hours = 3 days

84 days = 12 weeks

If the answer is incorrect, award **ONE** mark for two boxes completed correctly.

Up to 2m

[2]

11 (a) 57 min 15 sec

The answer is a time interval (see the guidance).

1

(b) 44 min 40 sec

1

[2]

12 Award **TWO** marks for the correct answer of 1,408

OR

for an answer in the range of 1,406 to 1,409 inclusive.

If the answer is incorrect, award **ONE** mark for:

- sight of 1,392

OR

- evidence of an appropriate method, e.g.
  - $24 \times 58\frac{2}{3}$ = answer

    Within an appropriate method, if a decimal equivalent for $\frac{2}{3}$ is given, it must be rounded or truncated to at least 2 decimal places.

  - 24 × 58 = 1,394 *(error)*
    $\frac{2}{3}$ of 24 = 16
    1,394 + 16 = answer
  - $24 \times \frac{176}{3}$ = answer
  - 24 × 58.67 = answer.

    *A final answer is required for the award of **ONE** mark.*

Up to 2m

[2]

13

(a) 140

The answer is a time interval

1

(b) 2

1

[2]

14

11 **OR** 12 **OR** any value between 11.5 and 11.6 inclusive

2

or

Any value between 277 and 288 inclusive seen *(value takes account of seconds in a minute and minutes in an hour)*

OR

Any value between 694 and 695 inclusive seen *(value takes account of hours in a day and either seconds in a minute or minutes in an hour)*

OR

Shows or implies a complete, correct method, eg:

- 1 000 000 ÷ 60 ÷ 60 ÷ 24
- 1 000 000 ÷ 86 400
- 16 666 ÷ 60 ÷ 24

Do not accept *place value errors in the value taken for one million in an otherwise correct method, eg:*

100 000 ÷ 60 ÷ 60 ÷ 24

1

[2]