

On these pages you will learn to read the time from different clocks.

a.m. means ante meridiem.

It is used for times before noon.

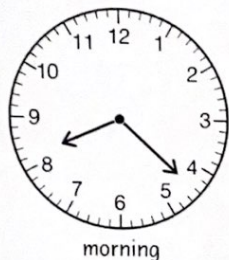
p.m. means post meridiem.

It is used for times after noon.

24-hour clocks always have four digits on display.

A 24-hour clock displays midnight as 00:00

### Examples



22 minutes past 8

8:22 a.m.

08:22

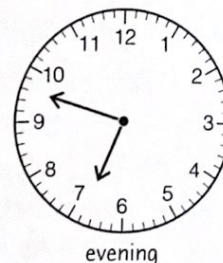
12-hour clock

24-hour clock

12 minutes to 7

6:48 p.m.

18:48



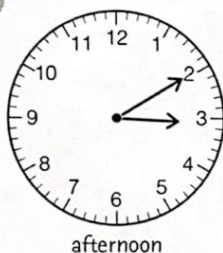
## A

Write each time shown to the nearest minute:

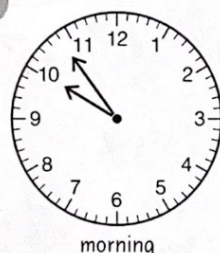
a) in words

b) in 12-hour clock time using a.m. and p.m..

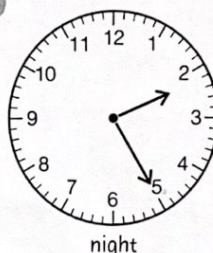
1



2



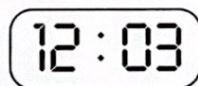
3



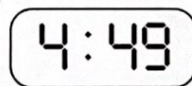
4



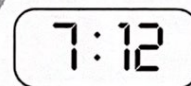
5



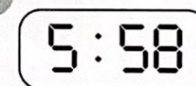
6



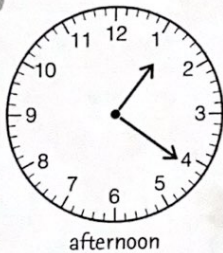
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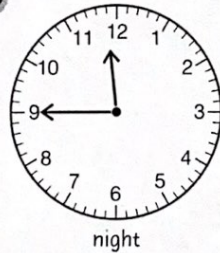
8



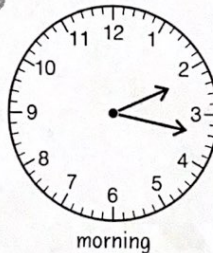
9



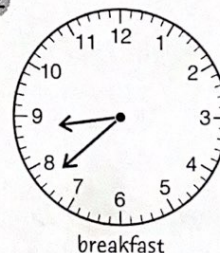
10



11



12



13 Write the 12-hour clock times if each of the twelve clocks above was:

a) 9 minutes slow

b) 6 minutes fast.



B

1 Copy and complete the table.

TIME IN WORDS	12-HOUR CLOCK	24-HOUR CLOCK
three o' clock	3:00 p.m.	15:00
		07:45
		20:30
		10:35
		03:52
	10:19 p.m.	
	9:37 a.m.	
	6:16 p.m.	
	11:28 a.m.	
	5:53 p.m.	

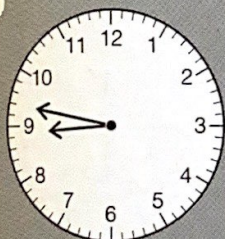
- 2 For each of the above times work out how many minutes there are to the next hour.  
 3 Write the correct time if each of the above 24-hour clock times is:  
 a) 35 minutes fast                      b) 14 minutes slow.

C

Write each time shown to the nearest minute:

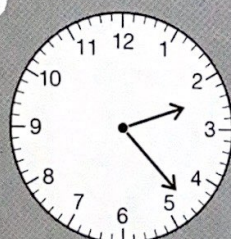
- a) in words      b) in 12-hour clock time      c) in 24-hour clock time.

1



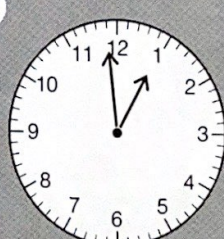
morning

2



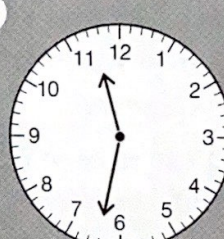
afternoon

3



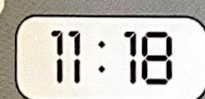
night

4



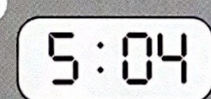
night

5



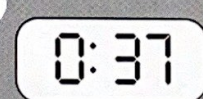
morning

6



afternoon

7



lunchtime

8



evening

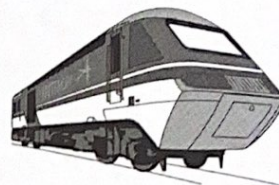
- 9 For each of the above times work out how many hours and minutes there are to midnight.  
 10 Copy and complete the table, changing 12-hour clock times to 24-hour clock times.

	Jan. 2nd	March 6th	May 1st	July 3rd	Sept. 4th	Nov. 6th
Sunrise	8:06 a.m.	6:36 a.m.	5:34 a.m.	4:49 a.m.	6:17 a.m.	7:02 a.m.
Sunset	4:03 p.m.	5:49 p.m.	8:23 p.m.	9:20 p.m.	7:41 p.m.	4:26 p.m.
Daylight length	7 h 57 mins.					



On this page you will learn to use timetables.

Waterloo (London)	07:10	08:35	11:35	13:50
Woking	07:35	—	12:00	14:15
Basingstoke	07:55	09:21	12:21	—
Andover	08:16	—	12:42	—
Salisbury	08:36	09:54	13:17	15:08
Yeovil	09:24	10:42	14:07	15:48
Honiton	10:01	—	14:53	16:34
Exeter	10:27	11:42	15:18	16:59



### A

- How long does it take the 07:10 from Waterloo to travel to:
  - Woking
  - Basingstoke
  - Andover?
- At how many stations does the 11:35 from Waterloo stop?
- At what time does the 08:35 from Waterloo reach Salisbury?
- If you had to be in Exeter by 15:30 which train would you catch from Waterloo?
- You arrive at Waterloo at 08:20. How long do you have to wait for the next train to Exeter?
- The 11:35 from Waterloo runs 10 minutes late. At what time will it reach Andover?



### B

- How long does it take the 11:35 from Waterloo to travel to:
  - Salisbury
  - Yeovil
  - Exeter?
- At how many stations does the 08:16 from Andover stop before it reaches Honiton?
- At what time does the 12:21 from Basingstoke reach Yeovil?
- If you had to be in Exeter by 12:00 which train would you catch from Basingstoke?
- You arrive at Waterloo at 11:08. How long do you have to wait for the next train to Exeter?
- The 08:35 from Waterloo runs 19 minutes late. At what time will it reach Exeter?

### C

- How long does it take the 07:55 from Basingstoke to travel to:
  - Salisbury
  - Yeovil
  - Exeter?
- At how many stations does the 09:21 from Basingstoke stop before it reaches Exeter?
- At what time does the 14:15 from Woking reach Honiton?
- If you had to be in Honiton by 16:00 which train would you catch from Salisbury?
- You arrive at Waterloo at 10:42. How long do you have to wait for the next train to Exeter?
- The 11:35 from Waterloo runs 38 minutes late. At what time will it reach Honiton?



# intervals of time

Answer these questions about time.

1



Look at this clock. Write the time shown as a digital time.

2

Write 4:45 pm as a 24-hour digital time.

3



Look at this clock. What was the time an hour earlier?

4



Look at this clock. What is the time going to be 25 minutes later?

Use the timetable to answer these questions.

Shubunkin pool activity times		
	Begins	Ends
Family swim	2:05 pm	3:15 pm
Wet and wild	3:15 pm	5:10 pm
Water slides	5:10 pm	6:30 pm
Free swim	6:30 pm	9:00 pm

- 5 Jo arrives at the pool at quarter to five in the afternoon. How long does she have to wait until Water slides starts?
- 6 How much longer is the length of time for Free swim than the length of time for Family swim?



How many hour and a half long DVDs could you watch if you got home from school at half past four and went to bed at nine o'clock?



I am confident with answering questions involving intervals of time.



# intervals of time

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Write 4:45 pm as a 24-hour digital time.

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How many hour and a half long DVDs could you watch if you got home from school at half past four and went to bed at nine o'clock?



## Answer these time questions.

1



Look at this clock. What time would it be 25 minutes earlier? Write your answer as a 12-hour digital time.

2



Look at this clock. Write the time it shows as a 24-hour digital time.

3

Pedal boat hire costs £5 for an hour or £10 for three hours. How much does it cost to hire a boat for 6 hours? How much would it cost to hire a boat for 4 hours?

## Look at this bus timetable. Use the information to answer the questions below.

Sutton	07:35		11:45	14:15	17:15
Erdington	07:55	08:20		14:35	17:35
Handsworth	08:20	08:45	12:30		18:00
Aston		09:05	12:50	15:20	18:20
Longbridge	09:20	09:45	13:30	16:00	

4

How long is there between the first two buses to leave Sutton?

5

Parveen needs to be in Longbridge by 2 pm. What is the latest bus she can take from Sutton to reach there in time?

6

Sam gets on the bus in Erdington at twenty-five to three. The bus is on time and he gets off at the next stop. Where does he get off and at what time? Give the time in 12-hour digital time, using am or pm.



A cake has to be baked for 35 minutes and needs to be ready for ten past four. If it needs to cool for half an hour, what time is the latest time it can be put in the oven?



This timetable shows the times trains stop at different stations. Use the information to answer the questions below.

London	06:55	08:30	09:25		16:48
Birmingham	09:10	10:34	11:31	14:11	18:55
Leeds	11:07	12:29		15:18	20:44
Newcastle	12:45	14:05		17:10	22:23
Edinburgh	13:55		16:00	18:28	23:39
Aberdeen	15:15	16:30	17:15	19:57	

- 1 Kylie gets to Birmingham station at 10:40 and catches the next train to Aberdeen. If she had arrived 10 minutes earlier at Birmingham station, how much earlier could she have arrived in Aberdeen?
- 2 Tom caught the train in London at five to seven and got off in Leeds to visit a friend. He spent 3 hours with his friend and then got on the next train from Leeds to Aberdeen. What time did he arrive in Aberdeen? Write the time in words.

Now answer these other word problems.

- 3 Andrea leaves Bristol at 13:23. Her journey takes 2 hours and 50 minutes. When does she arrive? Write the time in words.
- 4 Lorenzo arrives in Compton at 23:01. If his journey took 12 hours and 15 minutes, what time did he leave? Write the time in 24-hour digital time.



Perth in Western Australia is 8 hours ahead of the UK. Sunil lives in Perth and wants to talk to his friend Katie. Katie lives in London. They both work from 9 am to 5 pm each day. Between what times in Perth could Sunil phone Katie when neither of them is working?



I am confident with answering questions involving intervals of time.



On this page you will learn to understand different times around the world.

Because the Earth rotates on its axis once every 24 hours, times are different around the world. The table shows the differences between the time in London (Greenwich Mean Time) and the times in other cities around the world.

City	Time Difference	City	Time Difference
Rome	+1	Jerusalem	+2
New York	-5	Buenos Aires	-3
Karachi	+5	Hong Kong	+8
Mexico City	-6	Los Angeles	-8
Tokyo	+9	Sydney	+10

### A

What time is it in each of the cities in the table if it is 12:00 (noon) in London?

### B

Write down the time in each of the cities in the table if the time in London is:

a) 04:00    b) 22:00.

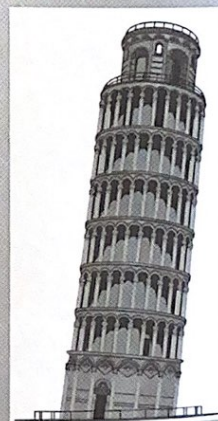
### C

1 An international company is based in London. It needs to contact its Head Offices in each of the cities in the above table when it is 09:00 in that city.

At what time would each telephone call need to be made from London?

2 Copy and complete the table showing arrival and departure times of international airline flights from London.

Depart	Flight (Hours)	Arrive	Local Time
16:00	2	Rome	
15:00	6	New York	
18:00	8	Karachi	
09:00	11	Mexico City	
17:00	13	Tokyo	
	4	Jerusalem	16:00
	13	Buenos Aires	15:00
	14	Hong Kong	10:00
	12	Los Angeles	18:00
	23	Sydney	08:00





# TIME PROBLEMS

89

On this page you will learn to solve problems involving time.

**A**

- 1 Reece started painting his room at 08:30. He finished at 15:10.  
For how long was he painting?
- 2 A boat left Portsmouth at 14:40. It arrived at Cherbourg at 22:20.  
How long did the voyage take?
- 3 The concert began at 19:45. It lasted for 2 hours 40 minutes.  
At what time did it end?
- 4 An athlete began running a marathon at 10:15. He finished the race at 13:50.  
For how long was he running?
- 5 Jason slept for eight and a half hours. He woke up at 07:10.  
At what time did he go to sleep?

**B**

Lamb must be cooked for 30 minutes for every pound.

Write down how long the meat needs to be cooked if it weighs:

- 1 3 lb
- 2 2 lb
- 3 2.5 lb
- 4 5.5 lb.

- 5 Copy and complete the table showing cooking times for lamb.

Weight	Start	Finish
3 lb	11:00	
4.5 lb	15:30	
2.5 lb	12:50	
3.5 lb	16:40	



**C**

Chicken must be cooked for 20 minutes and then 40 minutes for every kilogram.

Write down how long a chicken needs to be cooked if it weighs:

- 1 2.5 kg
- 2 3.5 kg
- 3 1.25 kg
- 4 2.75 kg.

- 5 Copy and complete the table showing cooking times for chicken.

Weight	Start	Finish
1.5 kg	11:45	
2.25 kg	15:35	
1.75 kg		12:30
3.25 kg		18:30

