Have a go at these arithmetic calculations.

1. 7291 + 6304 =

2. 210 483 – 67 928 =

3. 600 x 4 =

4. 66.43 ÷ 10 =

Complete as many of these as you can in 3 minutes:

1 23,459 + 32,499

1mark

2 199 + 499 =

1mark

3. Complete the table.

Number	Rounded to the nearest one	Rounded to the nearest 100
56.9		
124.45		
369.99		

Lesson 8

Learning Question:

Can I convert measurements of time?

Success Criteria:

- Understand that there are 24 hours in 1 day
- Know that time can be given in the 12-hour or the 24-hour clock
- When working out elapsed time; work out the difference in hours and minutes and add them together
- Know that there are 12 months in a year

Personal Target: **What are you going to focus on today?**

Vocabulary

Time
12-hour
24-hour
AM (Ante meridiem)
PM (Post meridiem)
Analogue
Digital
Clock/watch
Hour
Minute
Second
Midday
Midnight
Timetable
Calendar
Month
Months of the year
Date

Can you answer these time facts?

How many seconds in 1 minute?

How many minutes in 1 hour?

How many hours in 1 day?

Answers on next page

Can you answer these time facts?

How many seconds in 1 minute?

60 seconds = 1 minute

How many minutes in 1 hour?

60 minutes = 1 hour

How many hours in 1 day?

24 hours = 1 day

Can you understand and convert measurements of time?

12/24 Hour Clock

midnight	1 am	2 am	3 am	4 am	5am	6 am	7 am	8 am	9 am	10 am	11 am
0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
midday	1 pm	2 pm	3 pm	4 pm	5 pm	6 pm	7 pm	8 pm	9 pm	10 pm	11 pm
1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300

To go from 12 hour clock to 24 hour clock just **add** 12 to the hour.

Can you understand and convert measurements of time?

12/24 Hour Clock

midnight	1 am	2 am	3 am	4 am	5am	6 am	7 am	8 am	9 am	10 am	11 am
0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
midday	1 pm	2 pm	3 pm	4 pm	5 pm	6 pm	7 pm	8 pm	9 pm	10 pm	11 pm
1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300

To go from 12 hour clock to 24 hour clock just **add** 12 to the hour.

So can you answer these? (Answers on the next page)

8 pm becomes ?

9 pm becomes ?

6:30 pm becomes ?

11:30 pm becomes ?

4:20 pm becomes ?

3:10 pm becomes ?

Can you understand and convert measurements of time?

12/24 Hour Clock

midnight	1 am	2 am	3 am	4 am	5am	6 am	7 am	8 am	9 am	10 am	11 am
0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
midday	1 pm	2 pm	3 pm	4 pm	5 pm	6 pm	7 pm	8 pm	9 pm	10 pm	11 pm
1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300

To go from 12 hour clock to 24 hour clock just **add** 12 to the hour.

Answers:

8 pm becomes 2000

9 pm becomes 2100

6:30 pm becomes 1830

11:30 pm becomes 2330

4:20 pm becomes 1620

3:10 pm becomes 1510

12/24 Hour Clock

midnight	1 am	2 am	3 am	4 am	5am	6 am	7 am	8 am	9 am	10 am	11 am
0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
midday	1 pm	2 pm	3 pm	4 pm	5 pm	6 pm	7 pm	8 pm	9 pm	10 pm	11 pm
1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300

To go from 24 hour clock to 12 hour clock just **subtract** 12 from the hour.

12/24 Hour Clock

midnight	1 am	2 am	3 am	4 am	5am	6 am	7 am	8 am	9 am	10 am	11 am
0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
midday	1 pm	2 pm	3 pm	4 pm	5 pm	6 pm	7 pm	8 pm	9 pm	10 pm	11 pm
1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300

To go from 24 hour clock to 12 hour clock just **subtract** 12 from the hour.

So, can you answer these? (Answers on next page).

2000 becomes ?

2100 becomes ?

1730 becomes ?

2208 becomes ?

2006 becomes ?

1350 becomes ?

12/24 Hour Clock

midnight	1 am	2 am	3 am	4 am	5am	6 am	7 am	8 am	9 am	10 am	11 am
0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
midday	1 pm	2 pm	3 pm	4 pm	5 pm	6 pm	7 pm	8 pm	9 pm	10 pm	11 pm
1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300

To go from 24 hour clock to 12 hour clock just **subtract** 12 from the hour.

Answers:

2000 becomes 8 pm

2100 becomes 9 pm

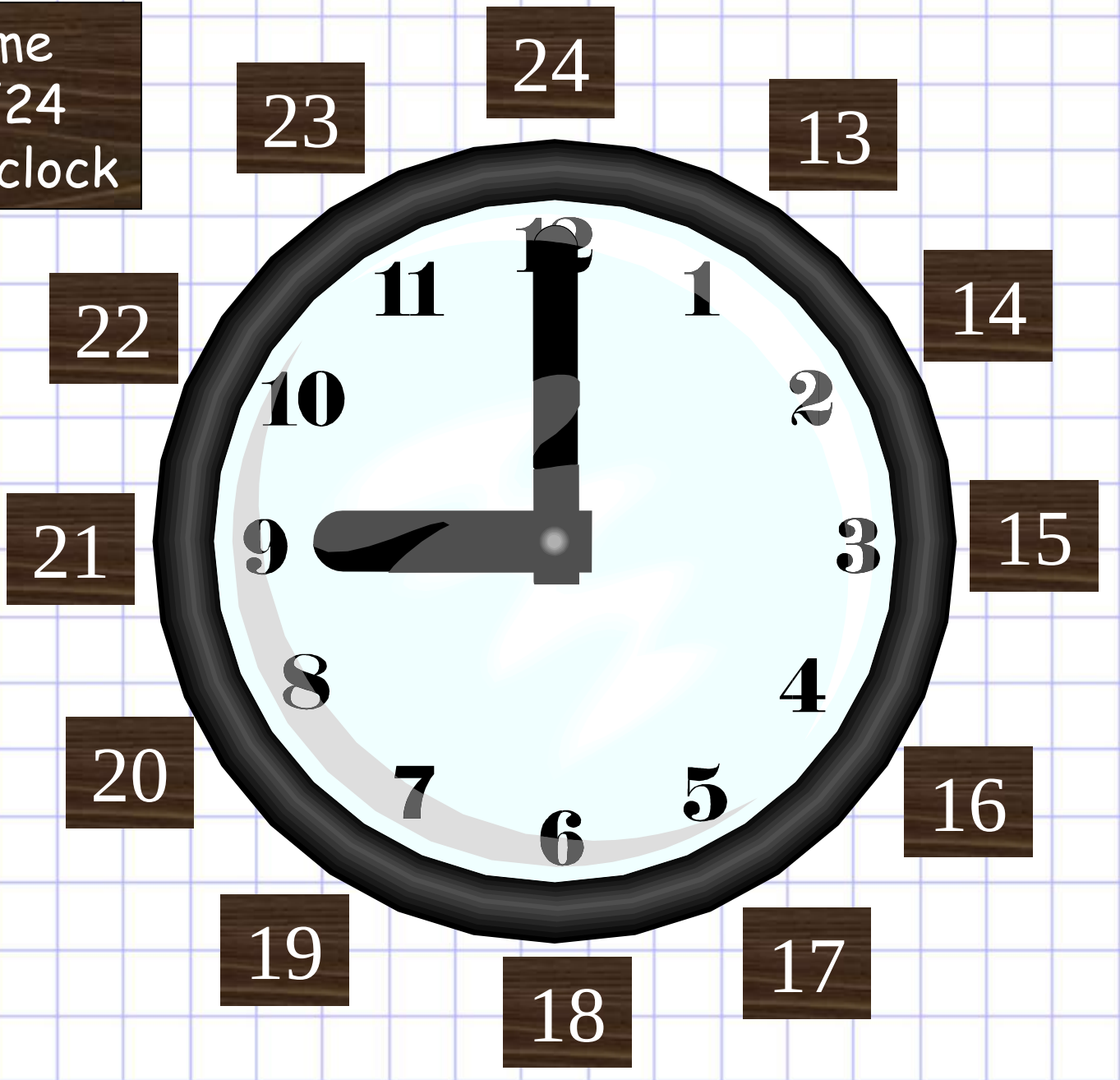
1730 becomes 5:30 pm

2208 becomes 10:08 pm

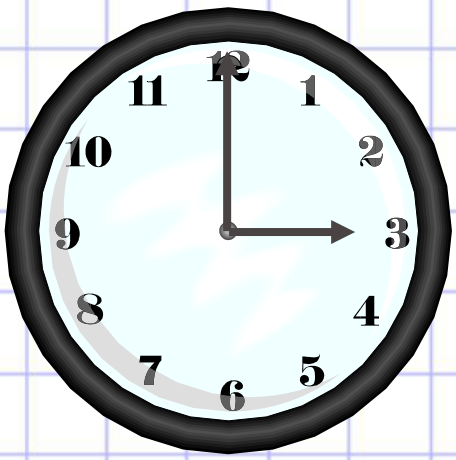
2006 becomes 8:06 pm

1350 becomes 1:50 pm

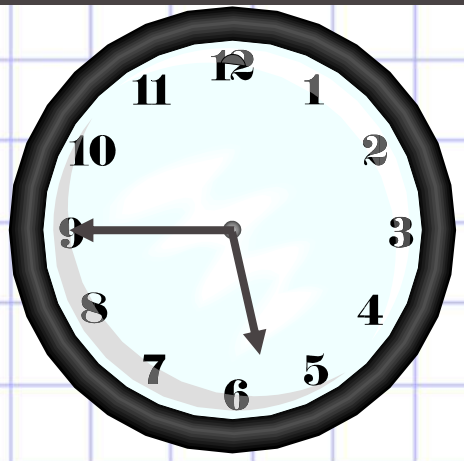
Time 12/24 hour clock

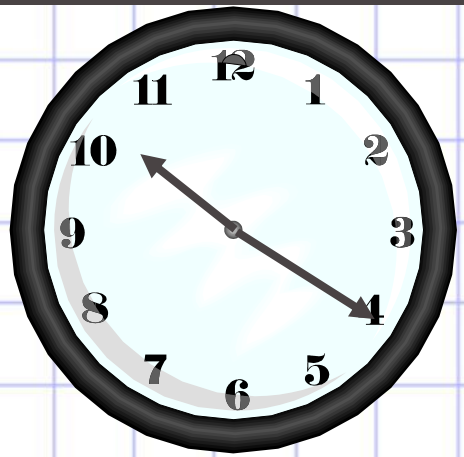


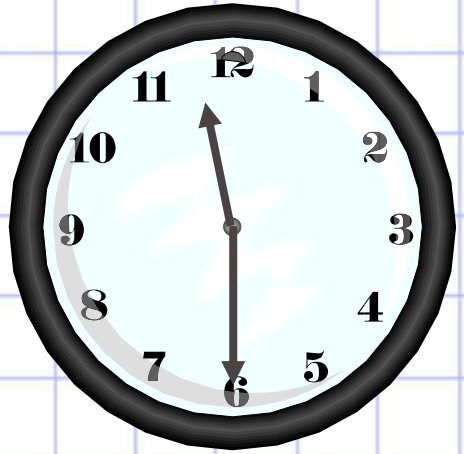
AM: Before Noon (Ante Meridiem)



For each of these can you give the am times in 24 hr clock?

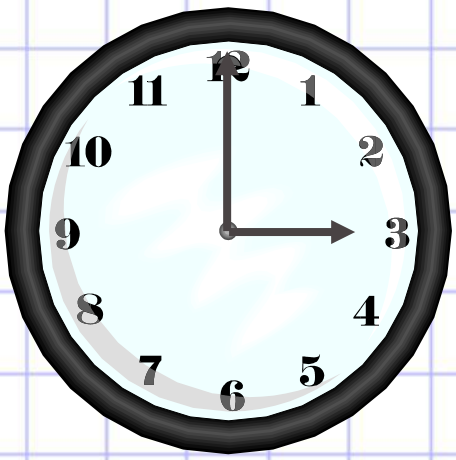






Answers on next page.

AM: Before Noon (Ante Meridiem)

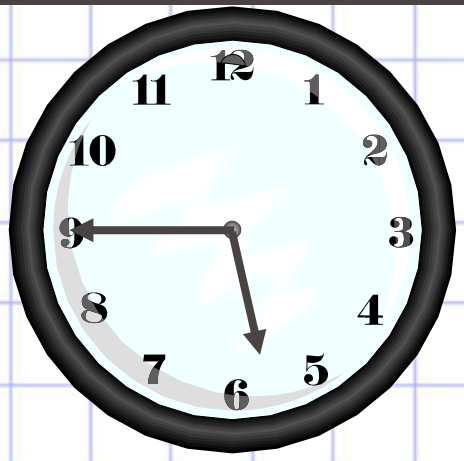


0300

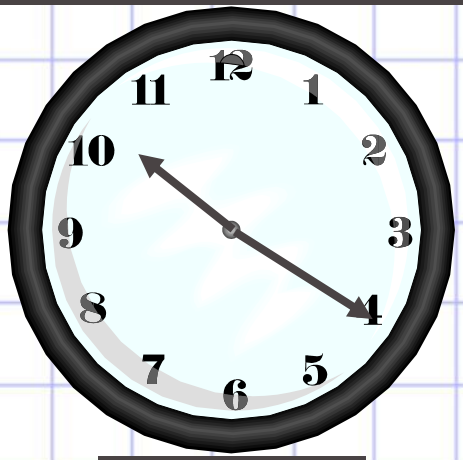
0515

0830

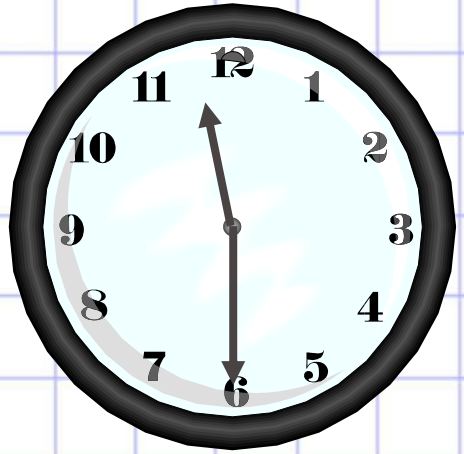
ANSWERS



0545

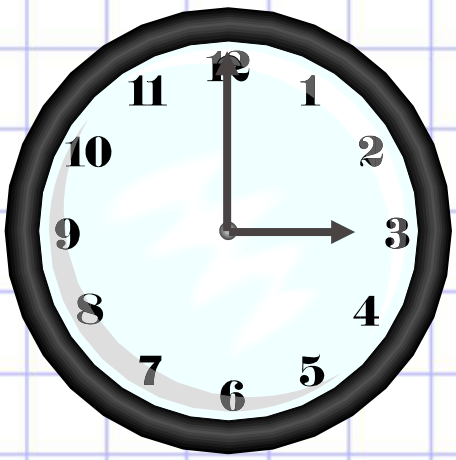


1020

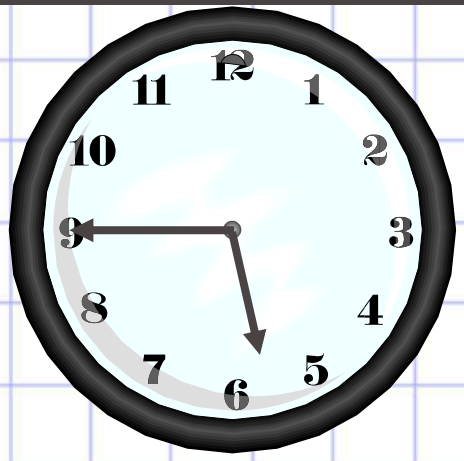
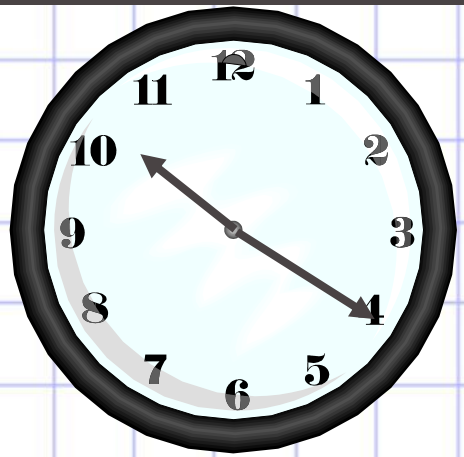
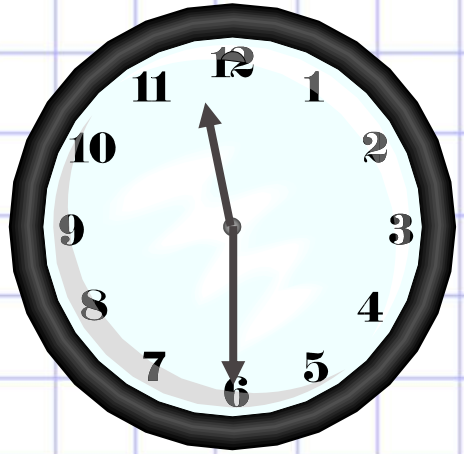


1130

PM: After Noon (Post Meridiem)

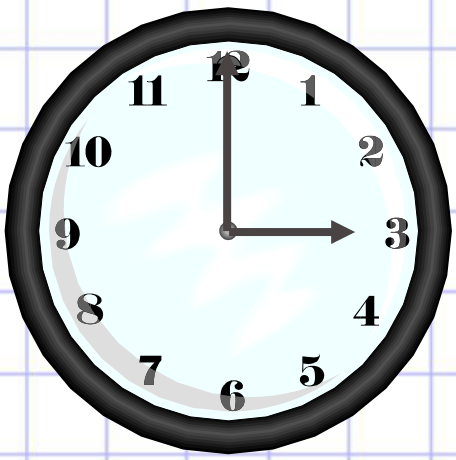


For each of these, can you give the **pm** times in 24 hr clock?

Answers on next page.

PM: After Noon (Post Meridiem)

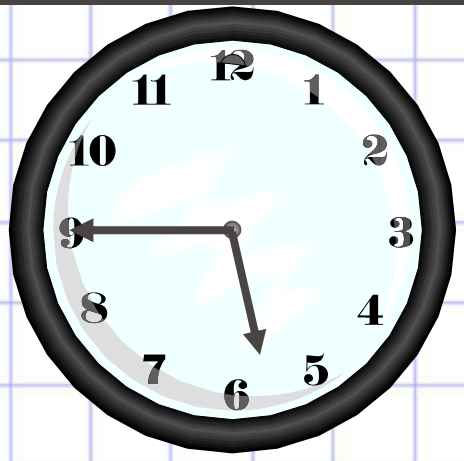


1500

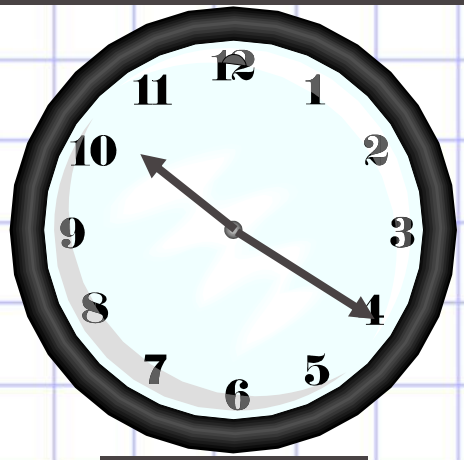
1715

2030

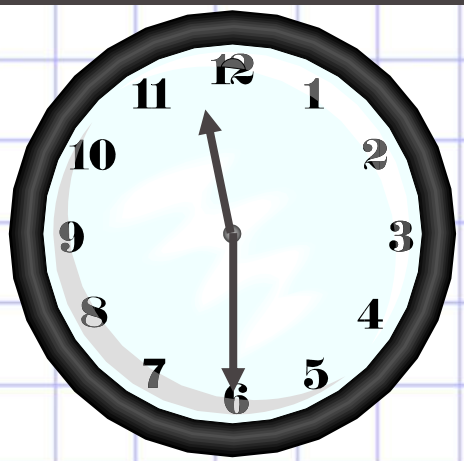
ANSWERS



1745



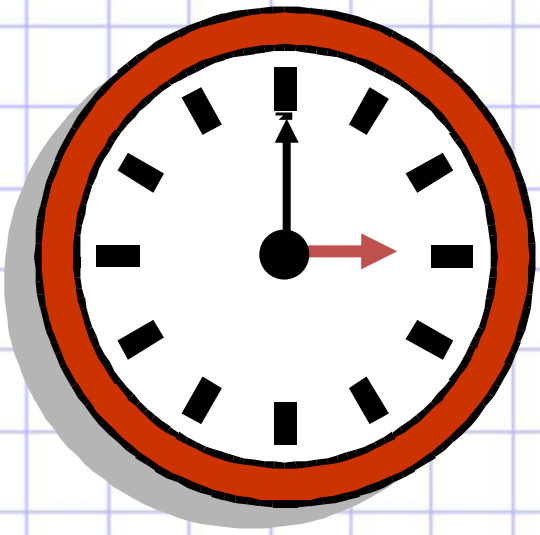
2220



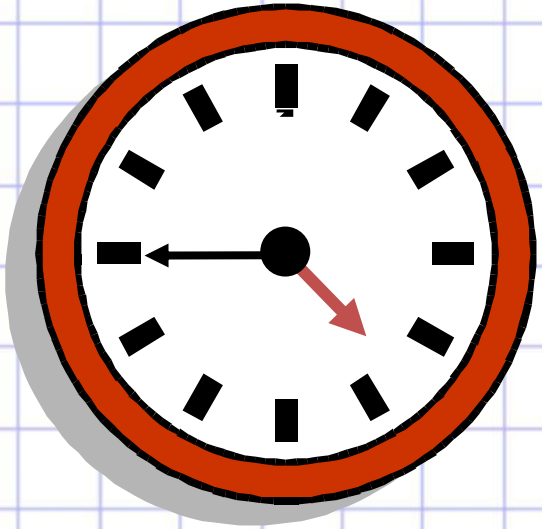
2330

Time

From 3 pm To 4:45 pm



1500



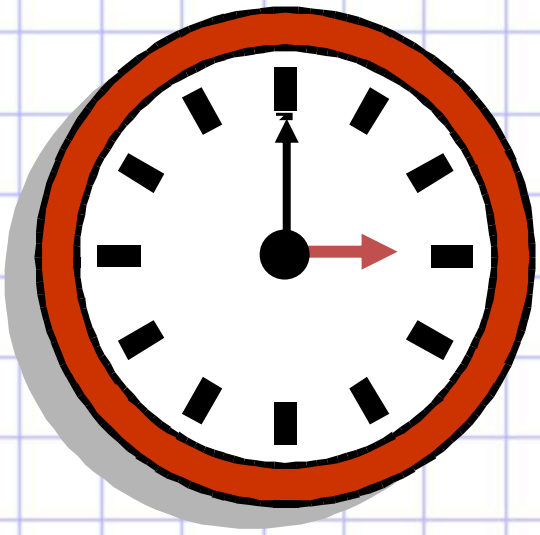
1645

How much time has passed (elapsed)?

Answer on next page.

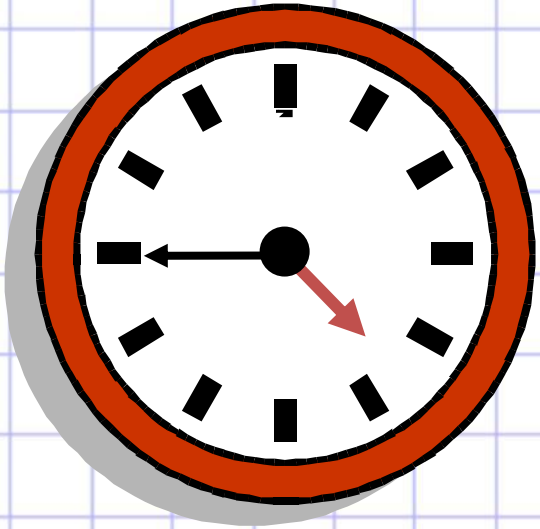
Time

From 3 pm



1500

To 4:45 pm



1645

How much time has passed (elapsed)?

3 pm to 4 pm = 1 hour

4 pm to 4:45 pm = 45 minutes

Elapsed time = **1 hour 45 minutes**

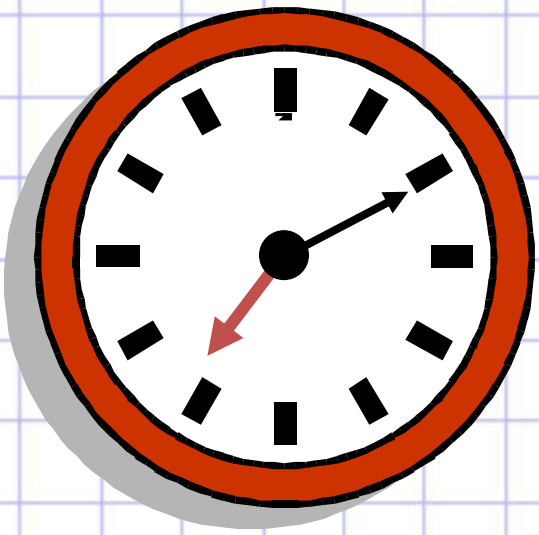
1500 to 1600 = 1 hour

1600 to 1645 = 45 minutes

Elapsed time = **1 hour 45 minutes**

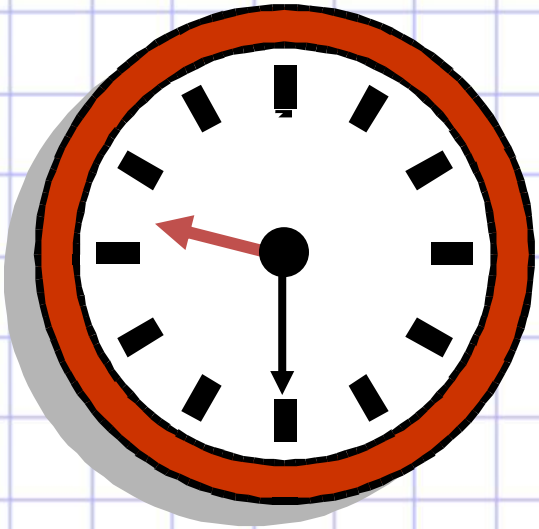
Time

From 7:10 pm



1910

To 9:30 pm



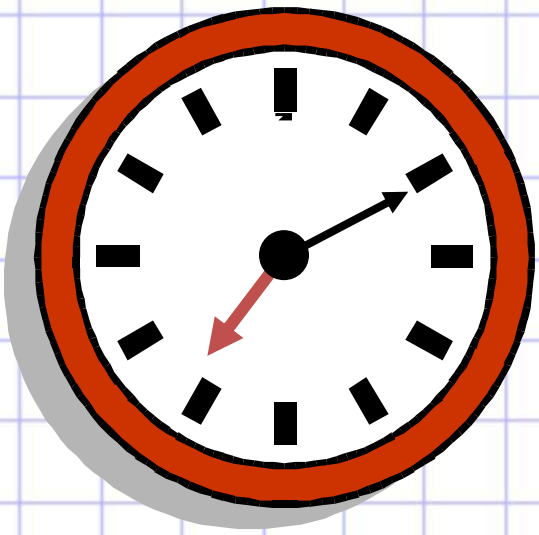
2130

How much time has passed?

Answer on next page.

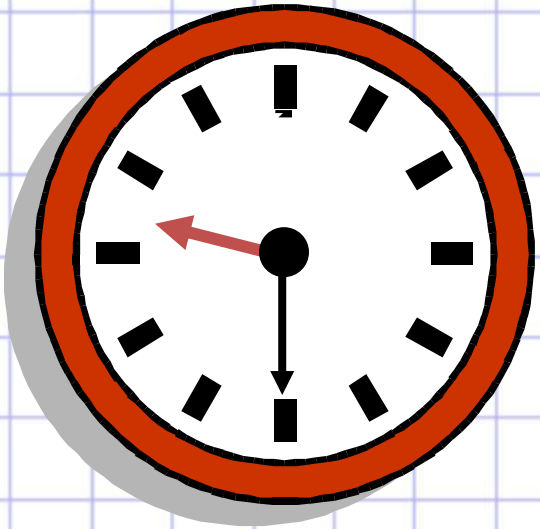
Time

From 7:10 pm



1910

To 9:30 pm



2130

How much time has passed?

7:10 pm to 9:10 pm = 2 hours

9:10 pm to 9:30 pm = 20 minutes

Elapsed time = **2 hour 20 minutes**

1910 to 2110 = 2 hours

2110 to 2130 = 20 minutes

Elapsed time = **2 hour 20 minutes**

How many months are there in a year?

What are the months of the year?

What does a ‘Leap Year’ mean?

Answers on next page.

Answers:

How many months are there in a year?

12

What are the months of the year?

January, February, March, April, May, June, July, August, September, October, November, December.

What does a ‘Leap Year’ mean?

A leap year is a year in which an extra day is added to the calendar. While an ordinary year has 365 days, a leap year has 366 days. A leap year comes once every four years. Because of this, a leap year can always be evenly divided by four.

How many days does each month have?

There is a rhyme to help you remember how many days each month has:

30 days hath September, April, June and November. All the rest have 31 except February alone, which has 28 days clear but 29 in a leap year.

Calendar for a Leap Year

January					
M		5	12	19	26
T		6	13	20	27
W		7	14	21	28
T	1	8	15	22	29
F	2	9	16	23	30
S	3	10	17	24	31
S	4	11	18	25	

February					
	2	9	16	23	
	3	10	17	24	
	4	11	18	25	
	5	12	19	26	
	6	13	20	27	
	7	14	21	28	
1	8	15	22	29	

March					
1	8	15	22	29	
2	9	16	23	30	
3	10	17	24	31	
4	11	18	25		
5	12	19	26		
6	13	20	27		
7	14	21	28		

April					
M		5	12	19	26
T		6	13	20	27
W		7	14	21	28
T	1	8	15	22	29
F	2	9	16	23	30
S	3	10	17	24	
S	4	11	18	25	

May					
	3	10	17	24	31
	4	11	18	25	
	5	12	19	26	
	6	13	20	27	
	7	14	21	28	
1	8	15	22	29	
2	9	16	23	30	

June					
	7	14	21	28	
1	8	15	22	29	
2	9	16	23	30	
3	10	17	24		
4	11	18	25		
5	12	19	26		
6	13	20	27		

30 days hath September, April, June and November. All the rest have 31 except February alone, which has 28 days clear but 29 in a leap year.

Calendar for a Leap Year

July					
M		5	12	19	26
T		6	13	20	27
W		7	14	21	28
T	1	8	15	22	29
F	2	9	16	23	30
S	3	10	17	24	31
S	4	11	18	25	

August					
	2	9	16	23	30
	3	10	17	24	31
	4	11	18	25	
	5	12	19	26	
	6	13	20	27	
	7	14	21	28	
1	8	15	22	29	

September					
	6	13	20	27	
	7	14	21	28	
1	8	15	22	29	
2	9	16	23	30	
3	10	17	24		
4	11	18	25		
5	12	19	26		

October					
M		4	11	18	25
T		5	12	19	26
W		6	13	20	27
T		7	14	21	28
F	1	8	15	22	29
S	2	9	16	23	30
S	3	10	17	24	31

November					
1	8	15	22	29	
2	9	16	23	30	
3	10	17	24		
4	11	18	25		
5	12	19	26		
6	13	20	27		
7	14	21	28		

December					
	6	13	20	27	
	7	14	21	28	
1	8	15	22	29	
2	9	16	23	30	
3	10	17	24	31	
4	11	18	25		
5	12	19	26		

30 days hath September, April, June and November. All the rest have 31 except February alone, which has 28 days clear but 29 in a leap year.

Your task:

Cut out the pieces of the time jigsaw and then match the sides up so that the finished puzzle makes a hexagon.

Stick the finished puzzle in your book or on a piece of paper or take a photograph of it.

It would be good to see your completed puzzles. You can send it to Mrs Bowden or Miss Bjorck either by photographing it and uploading it to your home learning blog in Purple Mash or ask your parent/carer to email it to your class email address:
Rosen: rosen-2061@ivervillage-jun.bucks.sch.uk
Rowling: rowling-2061@ivervillage-jun.bucks.sch.uk

Plenary:

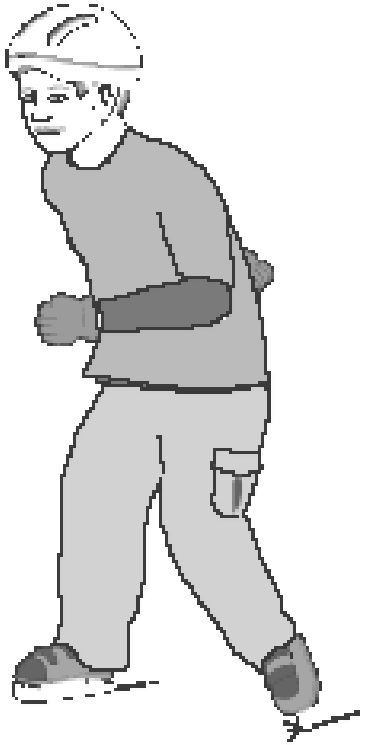
One of these watches is **3 minutes fast.**

The other watch is **4 minutes slow.**

What is the correct time?

Joe goes skating every Saturday.

He went skating on Saturday January 1st.



Altogether, how many times did Joe go skating in January?