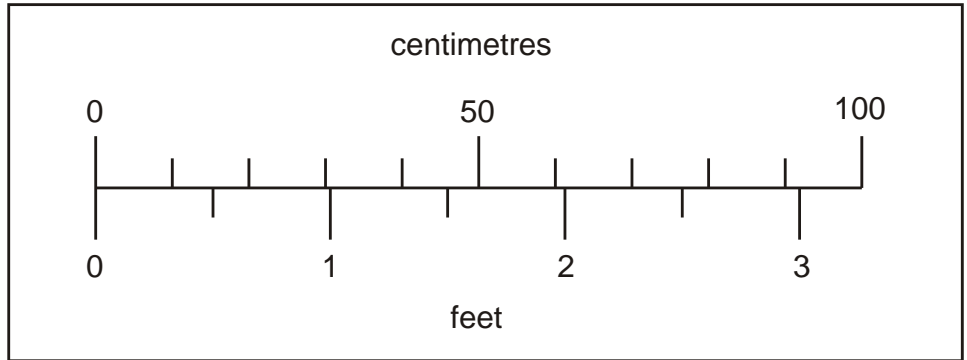


1. This scale shows length measurements in **centimetres** and **feet**.

Look at the scale.



Estimate the number of

centimetres that are equal to  $2\frac{1}{2}$  feet.


 **cm**

Estimate the difference in centimetres between 50cm and  $1\frac{1}{2}$  feet.

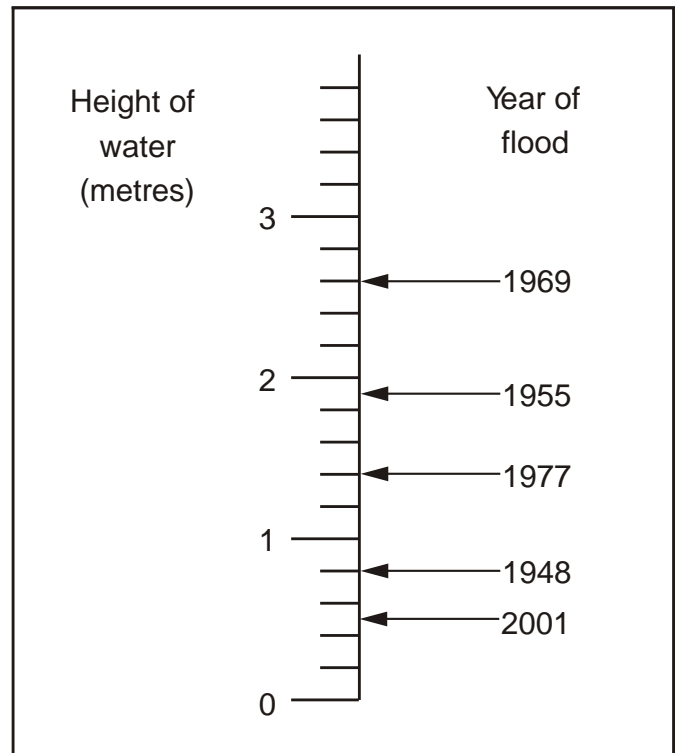

 **cm**

2. This scale shows the dates of floods and the height of the water in the floods.

How high was the water in the 1955 flood?

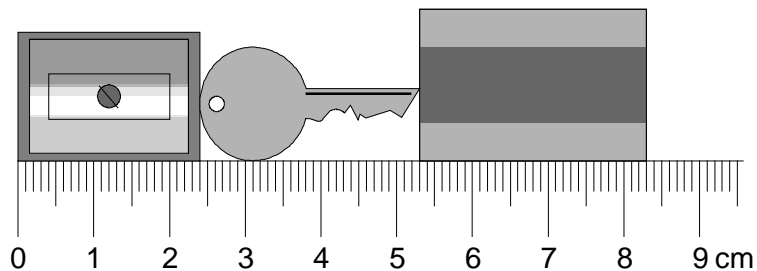

 **m**

How much higher was the water in the 1969 flood than in the 1948 flood?


 **m**



3. Here are a pencil sharpener, a key and a rubber.

**Actual size**




What is the length of **all three things** together?

Give your answer in **millimetres**.

  
 mm

What is the length of the **key**?

Give your answer in **millimetres**.

  
 mm

1. This table shows when flights take off at an airport.

Flight number	Destination	Take-off time ✈
AX40	Paris	13:35
BH253	Berlin	14:05
CG008	Rome	15:25
DP369	Paris	15:40
EZ44	Lisbon	16:15
FJ994	Dublin	17:25

How many flights take off between 3pm and 5pm?



How much later does the second flight to Paris take off than the first?



The flight to Dublin takes 50 minutes.

What time does it arrive in Dublin?

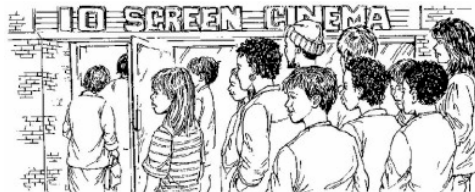


2. A film starts at 6:45pm.

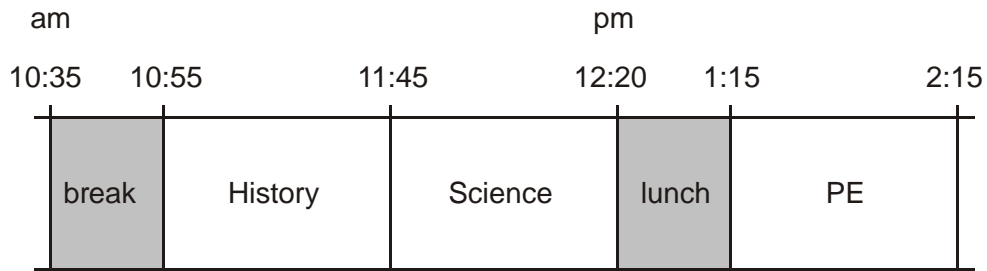
It lasts 2 hours and 35 minutes.

What time will the film finish?

.....pm




3. Here is part of the timetable for Class 6 on a Monday.



Look at the timetable.

How long is it from the **end** of break to the **start** of lunch?


 .....

1 mark

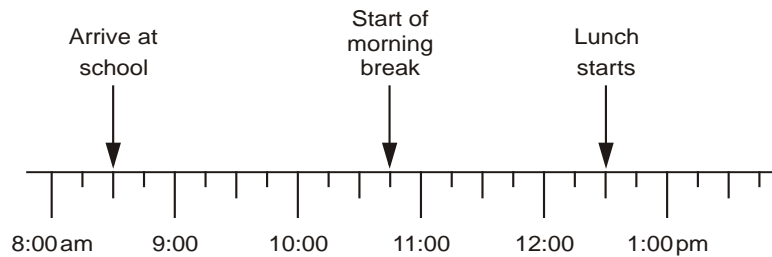
Nisha leaves the Science lesson after 25 minutes.


Then she goes to the dentist.

What time does she leave the Science lesson?




4, Jamie makes a time line of part of his day.



What time does Jamie's morning break start? 

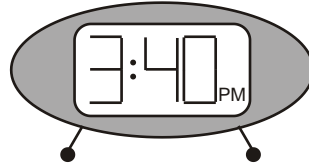
am

Lunch lasts for three-quarters of an hour.

What time does lunch **finish**? 

pm

5. A clock shows this time.



How long is it from this time until 5pm?



What time was it quarter of an hour before the time on the clock?

 pm

6. These are the radio programmes one morning.

7:00	Music show
7:55	Weather report
8:00	News
8:15	Travel news
8:25	Sport
8:45	Holiday programme



Josh turns the radio on at 7:25 am.

How many minutes does he have to wait for the Weather report?  .....

The Holiday programme lasts for 40 minutes.

At what time does the Holiday programme finish?  .....

7. Here is part of a train timetable.

Edinburgh	–	09:35	–	–	13:35	–	–
Glasgow	09:15	–	11:15	13:15	–	13:45	15:15
Stirling	09:57	–	11:57	13:57	–	14:29	15:57
Perth	10:34	10:51	12:34	14:34	14:50	15:15	16:35
Inverness	–	13:10	–	–	17:05	–	–



How long does the first train from Edinburgh take to travel to Inverness?

 .....

Ellen is at Glasgow station at 1.30pm. She wants to travel to Perth.

She catches the next train.

At what time will she arrive in Perth?

 .....

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

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

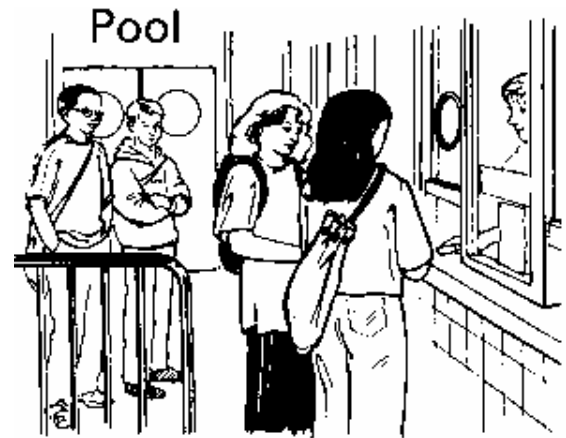
What is the correct time?





9. These are the opening times at a swimming pool.

	opening times		
	am		pm
Monday	Pool closed		
Tuesday			
Wednesday	10:30	to	5:30
Thursday	10:30	to	8:30
Friday	10:30	to	9:00
Saturday	8:00	to	6:00
Sunday	7:00	to	4:00



How many **hours** is the pool open on a **Sunday**?

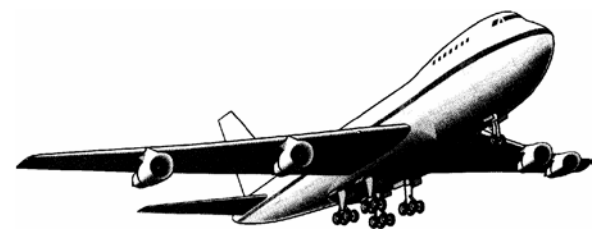
 .....

10. An aeroplane takes off on Tuesday at

22:47

It lands on Wednesday at

07:05



How long in hours and minutes is the flight?

<b>hours</b>	<b>minutes</b>
--------------	----------------

11. These are the start and finish times on a DVD recorder.

**START**      **14:45**

**FINISH**     **17:25**

For how long was the DVD recording?

<b>hours</b>	<b>minutes</b>
--------------	----------------

12. Jamie, Kate and Hassan run a 50m race.

Kate's time is 13 seconds.

Jamie finishes 5 seconds before Kate.

Hassan finishes 3 seconds after Jamie.

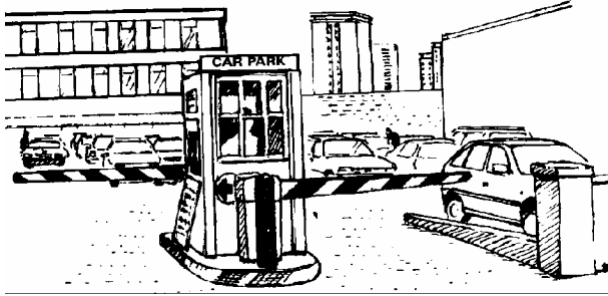
What is **Hassan's time** in seconds?



<b>seconds</b>
----------------



13.



Car Park charges	
Time	Charge
up to 1 hour	20p
1 to 2 hours	50p
2 to 3 hours	£1.00
3 to 4 hours	£1.70
over 4 hours	£5.00

Emma parks her car at **9.30 am**.

She collects the car at **1.20 pm**.

How much does she pay?


 .....

Dan and Mark both use the car park.

Dan says,

***'I paid exactly twice as much as Mark but I only stayed 10 minutes longer'.***

Explain how Dan could be correct.

 .....

.....

.....

14. Here are the sunrise and sunset times for some days in July.

Date	Sunrise	Sunset
7th	04:53	21:18
14th	05:00	21:12
21st	05:09	21:05
28th	05:18	20:55

How many minutes earlier is the **sunset** on 28th July than on 7th July?

 .....minutes

15. Some children ran in two races on sports day.

Here are their times.

	100m race	800m race
Elise	15.9 seconds	3 minutes 02 seconds
Jake	19.7 seconds	2 minutes 58 seconds
Teri	16.8 seconds	3 minutes 01 seconds
Neil	17.1 seconds	2 minutes 59 seconds
Barry	18.4 seconds	2 minutes 57 seconds

Who finished the 100m race in **second** place?

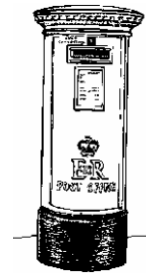
 .....

In the 800m race, how many seconds did Barry finish ahead of Elise?


 .....seconds

16 These are the times letters are collected from a post box.

Monday to Friday	Saturday	Sunday
8am 2pm 6:30pm	11:30am	no collection




What is the **latest** time letters are collected on **Wednesday**?



Carla posts a letter at **9 am on Monday**.

How **long** will it be before it is collected?

  
 **hours**

Gareth posts a letter on **Saturday at 3pm**.

When is it collected from the post box?

 day ..... time .....

17. Tom, Amy and Helen want to go on a boat trip.



There are three boats.

<b>Lark</b> 50 minute trip <b>Tickets</b> <b>£2.75</b> <b>each</b>	<b>Heron</b> 70 minute trip <b>Tickets</b> <b>£3.50</b> <b>each</b>	<b>Kestrel</b> 90 minute trip <b>Tickets</b> <b>£4.20</b> <b>each</b>
--	---	---

Tom and Amy go on the **Heron**.

They leave at **2:15pm**.

At what **time** do they return?

 .....

Helen goes on the **Kestrel** and **gets back at 4:15pm**.

At what **time** did the boat leave?

 .....

1. Circle the time that is 30 minutes **before** midnight.



12:30 am

12:30 pm

11:30 am

11:30 pm

3 am

2. Put these times in order, starting with the shortest.

5 minutes

20 seconds

100 seconds

1 minute



shortest

3. The time is

8:15

John has to be ready for school in half an hour.

Tick (✓) the time when he has to be ready.

8:20

8:25

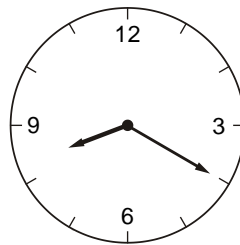
8:30

8:45

8:55

4 . Here are two clock faces.

Join each clock face to  
the correct digital time.



9:20

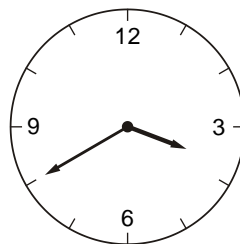
3:40

4:40

8:40

8:20

4:20



5. The time is 10:35am.




Kate says,

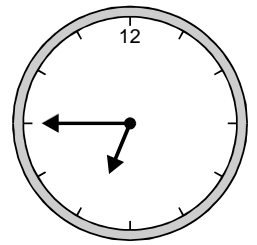
***'The time is closer to 11:00am than to 10:00am'.***

Explain why Kate is correct.




6. Here is a clock. How many minutes is it **until** this clock shows 7:30?

.....mins



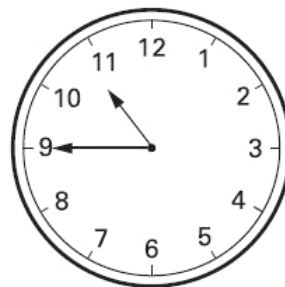
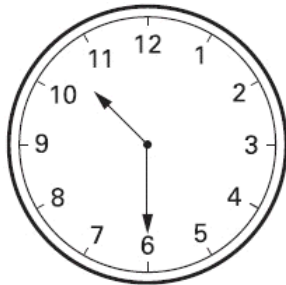
Here is another clock. What time will the clock show in 20 minutes?

.....

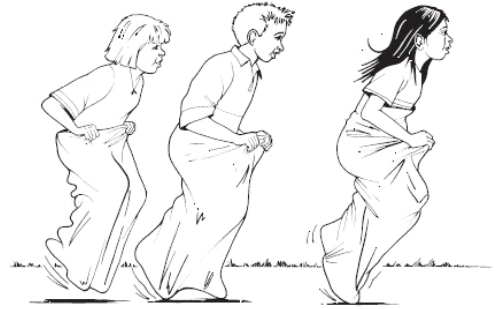


7. **Two** clocks show the same time.

Tick (✓) them.



8. The Fun Day started at this time in the morning.



It finished at this time in the afternoon.

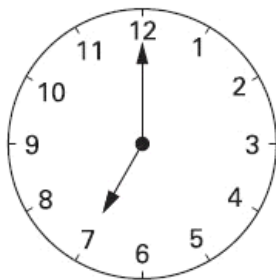


How long did the Fun Day last?

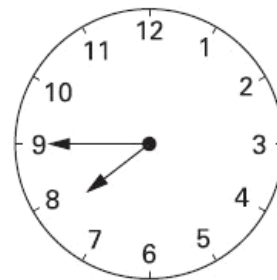


hours	minutes
-------	---------

9. These clocks show the **start** and **finish** times of a TV programme.



**start**



**finish**

For how many minutes does the programme last?



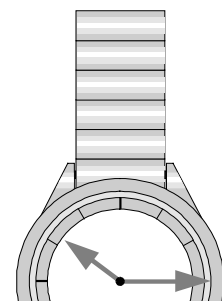
.....mins



10. Jack leaves for school at this time.

It takes him **40 minutes** to get to school.

Tick (✓) the time Jack gets to school.



11. This was the time on Selin's watch when she **set off** for a walk.

1 What time did the watch show 20 minutes **before** this?

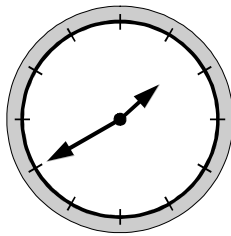
 .....

What time did it show an hour and a half **after she set off** for the walk?

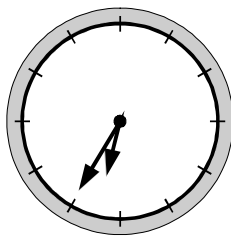
 .....

12. Here are three clock faces.

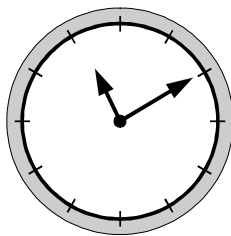
Match each clock face to the same time on a digital clock.



11:10



2:55



1:40

8:10

6:35

7:35

**Trial and improvement using a calculator**

1. Find the multiple of 45 that is closest to 8000



Show your **method**.  
You may get a mark.






2. Two whole numbers are each **between 50 and 70**

They multiply to make 4095

Write in the missing numbers.

  ×  = 4095

3.            7.4            8.1            9.4            10

Which two of these numbers, when multiplied together, have the answer closest to 70?

  and

4. *m* stands for a whole number greater than 10 and less than 20

*n* stands for a whole number greater than 2 and less than 10

What is the **smallest** number that  $m \times n$  could be?

 .....

What is the **largest** number that  $m - n$  could be?


 .....

5. Write the **three prime numbers** which multiply to make **231**

  ×  ×  = **231**

6. The **same** number is missing from each box.

Write the **same** missing number in each box.

  ×  ×  = **1331**

7. The signs are missing from these number sentences.

Write in the missing signs, + − × or ÷

The first has been done for you.

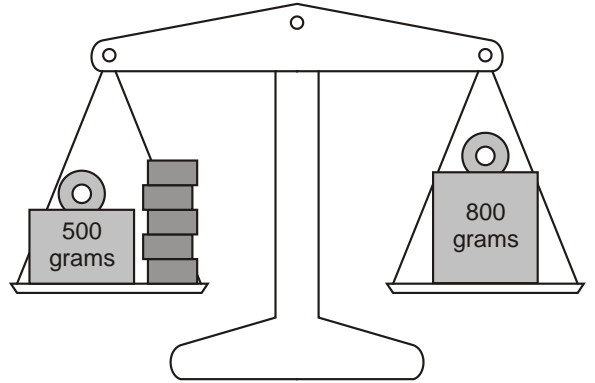


**6**  × **5** = **40**  − **10**

**20**  **8** = **4**  **7**

**21**  **3** = **15**  **8**

1. Lin has five blocks which are all the same.  
She balances them on the scale with two weights.  
Calculate the weight of **one** block.

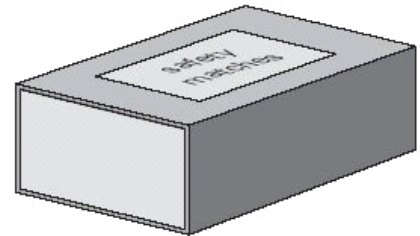


Show your **working**.  
You may get a mark.

[Empty box for working]

[Small empty box for answer]

2. A box contains 220 matches and weighs 45 grams.  
The empty box weighs 12 grams.  
Calculate the weight of **one** match.



Show your **method**.  
You may get a mark.

[Empty box for method]

[Small empty box for answer, labeled 'g']

3. Every **100g** of brown bread contains **6g** of fibre.  
A loaf of bread weighs 800g and has 20 equal slices.  
How much fibre is there in **one** slice?






Show your **method**.  
You may get a mark.

g

4. A packet contains **1.5 kilograms** of guinea pig food.  
Remi feeds her guinea pig **30 grams** of food each day.



How many days does the packet of food last?

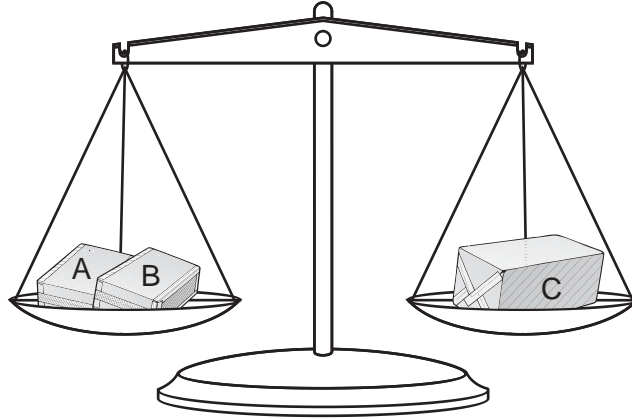


Show your **method**.  
You may get a mark.

days

5. Amir has three parcels.

Parcels A and B together weigh the same as parcel C.



The three parcels weigh 800 grams altogether.

Parcel A weighs 250g.

How much does parcel B weigh?



Show  
your **working**.  
You may get  
a mark.

g

Cheddar cheese costs £7.50 for 1kg.

Marie buys 200 grams of cheddar cheese.

How much does she pay?

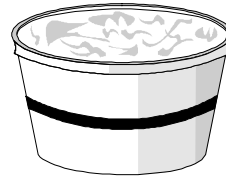


£

Cream cheese costs £3.60 for 1kg.

Robbie buys a pot of cream cheese for 90p.

How many grams of cream cheese does he buy?



Show your **method**.  
You may get a mark.

grams



2. Here is a recipe for raspberry ice cream.

<b>raspberry ice cream for 8 people</b>
<b><math>\frac{1}{2}</math> litre of cream</b>
<b>1kg raspberries</b>
<b>250g sugar</b>



This recipe is for **8 people**.

Josie makes enough raspberry ice cream for **20 people**.

How much **cream** does she use?



litre
-------

Fred makes raspberry ice cream in the same way.

He uses  **$3\frac{1}{2}$  kg** of **raspberries**.

How much **sugar** does he use?



Show  
your **method**.  
You may get  
a mark.

g
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