

Question 1

A teacher is organising a trip to Pleasureland. There are 560 pupils going on the trip. The pupils will go by coach. Each coach can carry 52 pupils.

(a) Work out how many coaches are needed.

45% of the pupils are boys.

(b) Work out the number of boys going on the trip.

The number of teachers needed on the trip is found by using this formula:
Number of teachers on the trip equals "the number of pupils divided by 25 and rounded down to the next whole number".

(c) How many teachers are needed on the trip?

Do NOT use your calculator for part (d) of this question. Show all your working.
Each pupil pays £14 to go on the trip.

(d) Work out the total amount paid by the pupils.

Question 2

John is going to Spain on holiday.



He changes £190 to Spanish pesetas.

£1 = 183 pesetas.

- (a) i) Work out how many pesetas John gets.
ii) Write your answer to part (i) correct to 3 significant figures.

IN THIS PART OF THE QUESTION YOU MUST SHOW ALL YOUR WORKING

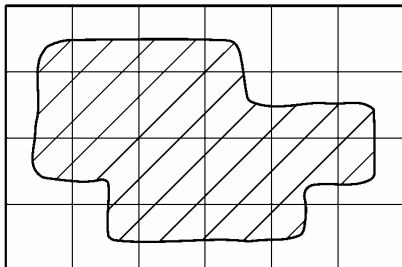
The holiday costs £621.

John has to pay the £621 in 27 equal weekly amounts.

- (b) i) Without using a calculator, work out how much he must pay each week.
ii) Write down an approximate calculation you could use to check your answer.
iii) Work out the answer to the approximate calculation

Question 3

The diagram represents the surface of a lake in winter. The lake is shaded on the grid.



- (a)** Estimate the area, in cm^2 , of the diagram that is shaded.

Each square on the grid represents a square with sides of length 100m.

- (b)** Work out the area, in m^2 , represented by one square on the grid.

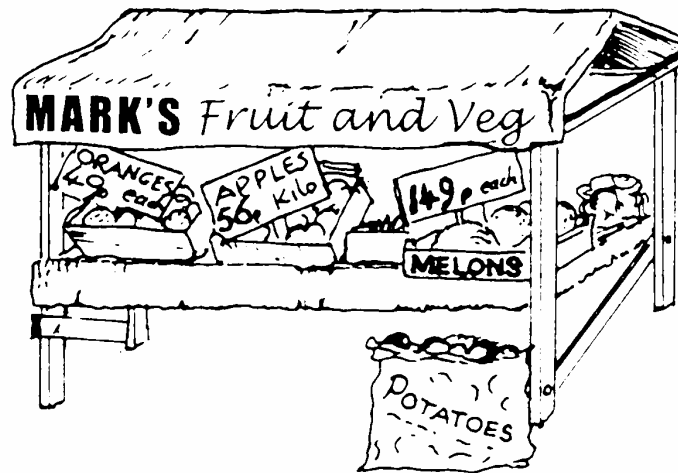
- (c)** Estimate the area, in m^2 , of the lake.

In summer the area of the lake decreases by 15%.

- (d)** Work out the area, in m^2 , of the lake in summer.

Question 4

Mark has a market stall.



He sells apples at 56p for each kilogram.

Biance buys 4 kilograms of apples.

She pays for her apples with a £5 note.

(a) How much change should she get? **(3 marks)**

Mark bought 25 melons for his stall

He paid £16 for 25 melons.

(b) Work out the price Mark paid for each melon **(3 marks)**

Do **NOT** use a calculator and show **ALL** your working.

Mark sold 23 of the melons for 149p each.

(c) Work out the total amount for which Mark sold the melons. **(2 marks)**

Do **NOT** use a calculator and show **ALL** your working.

Mark usually sells oranges for 40p each.

He reduces the price to $\frac{7}{8}$ of this.

(d) Work out the new price of an orange. **(2 marks)**

Mark bought his potatoes for 30p for each kilogram.

He sold the potatoes and made a profit of 40%.

(e) At what price did Mark sell the potatoes? **(3 marks)**

Question 5

Work out the value of

i) 5^3

ii) $\sqrt{36}$

iii) $2^3 \times 3^2$

(4 marks)

Question 6

Socks cost £2.85 a pair.

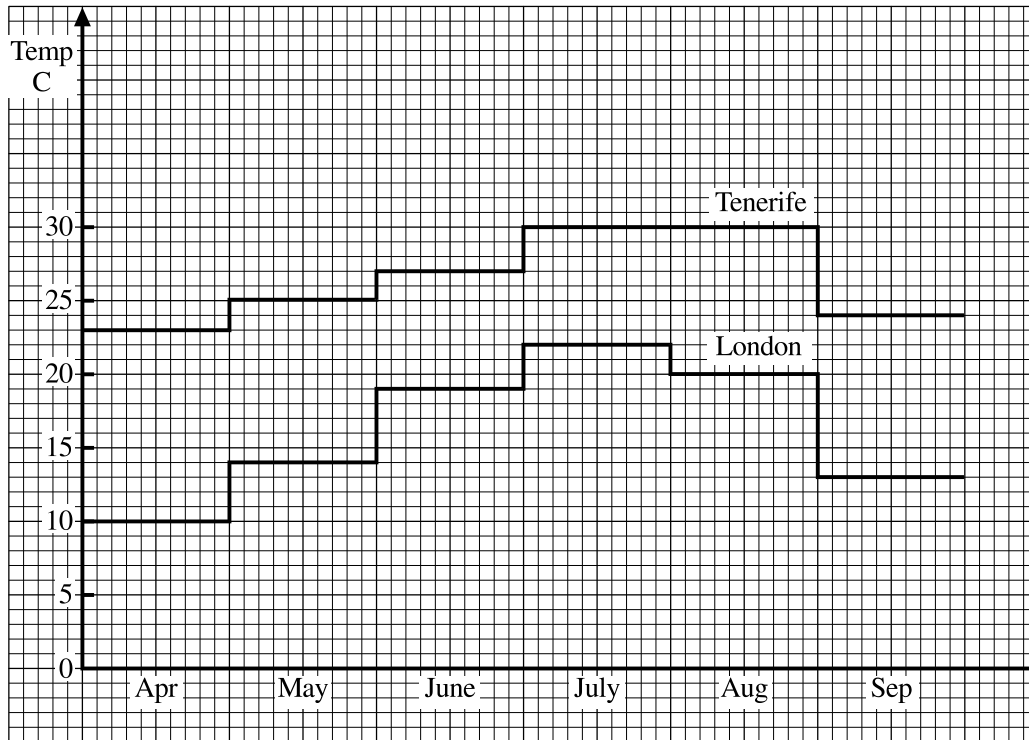
Afzal has £15.

Afzal estimates in his head how many pairs of socks he could buy for £15.

(a) Write down a sum he could do in his head. **(2 marks)**

(b) Use your sum to estimate how many pairs of socks Afzal could buy. **(1 mark)**

Question 7



The diagram shows the average midday temperature in London and in Tenerife during the summer months.

- During which months is the average midday temperature normally the highest in Tenerife? **(1 mark)**
- During which month is there the greatest difference between the average midday temperature between London and Tenerife? **(1 mark)**
- Write down the average midday temperature for London in May. **(1 mark)**
- Work out the mean average midday temperature for June to August in Tenerife. **(2 marks)**

You can exchange £1 for 189 pesetas in Tenerife.
A large bottle of sun lotion costs 1375 pesetas.

- Change 1375 pesetas into pounds and pence. Give your answer correct to the nearest penny. **(3 marks)**

Question 8

A first class stamp costs 26p.

- (a) What is the greatest number of first class stamps you can buy for £2? **(1 mark)**

Jean buys 10 first class stamps. She pays with a £5 note.

- (b) How much change should she get? **(2 marks)**

Question 9

A calculator gives this list of numbers:

15 23 40 36 42 39

- (a) Write down the two numbers that are multiples of five. **(2 marks)**
(b) Write down the number that has seven as a factor. **(1 mark)**
(c) Write down the number that is a square number. **(1 mark)**
(d) Write down the number that is a prime number. **(1 mark)**

Question 10

In this question you must **NOT** use a calculator.
You must show **ALL** your working.

Tom buys 67 cameras at £312 each.

- (a) Work out the total cost. **(3 marks)**
(b) Write down two numbers you could use to get an approximate answer to your calculation **(2 marks)**

Question 11

In 1998 Ray had to pay 4 bills for his car.

- (a)** Work out the total cost.

Write your answer in the table.

(2 marks)

	Cost in 1998
Road Tax	£145.00
Insurance	£512.00
MOT test	£28.66
Repairs	£368.27
Total cost	£

In 1998 Ray used 950 litres of petrol.

1 litre of petrol cost 67.9 pence.

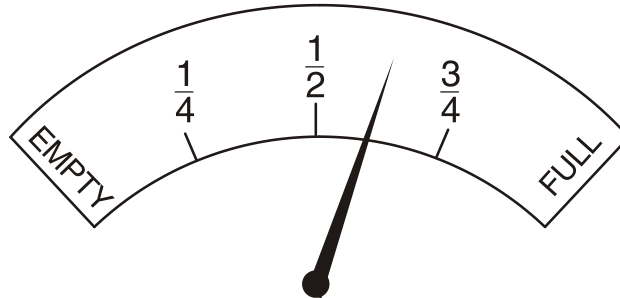
- (b)** Work out the total cost of the petrol.

Give your answer in pounds and pence.

(2 marks)

Question 12

This dial shows how much petrol is in the petrol tank of a car.



The full petrol tank holds 40 litres.

Estimate how many litres are left in the petrol tank.

(2 marks)

Question 13

Henry bought

2 pencils at 28p each,
4 pads of paper at £1.20 each and
1 magazine at £2.95.

He paid with a £10 note.

How much change should Henry get from £10?

£
(3 marks)

Question 14



One evening last winter the temperature in Cardiff was 3°C , in Belfast was -4°C and in Edinburgh was -10°C .

(a) Work out the difference in temperature between

(i) Cardiff and Belfast, $^{\circ}\text{C}$

(ii) Edinburgh and Belfast. $^{\circ}\text{C}$
(2 marks)

The temperature in Belfast increased by 6°C .

(b) Work out the new temperature in Belfast. $^{\circ}\text{C}$
(1 mark)

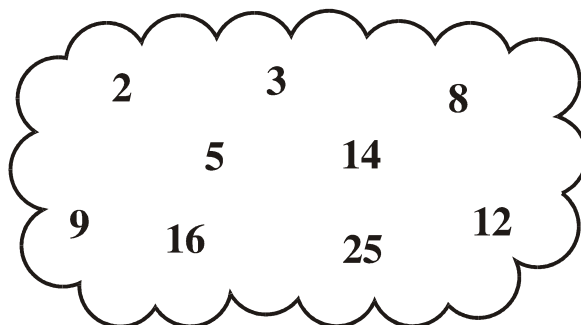
The temperature in Edinburgh fell by 5°C .

(c) Work out the new temperature in Edinburgh.

..... °C
(1 mark)

Question 15

Use the numbers in the cloud to answer these questions.



From the numbers in the cloud write down those numbers

- (i) which are even numbers,
- (ii) which are multiples of 3,
- (iii) which are the square roots of another number in the cloud.

(6 marks)

Question 16

Here is part of a bus timetable.

Wigan – Atherton – Eccles – Manchester					
Wigan , Bus station	0530	0555	0620		0640
Castle Hill	0545	0610	0635		0655
Hindley Green	0552	0617	0642		0702
Atherton	0558	0623	0648	0700	0710
Tyldesley	0604	0629	0654	0706	0716
Monton Green	0625	0650	0715	0729	0739
Eccles	0631	0656	0722	0736	0746
Weaste	0633	0658	0725	0739	0749
Trafford Road	0636	0701	0730	0744	0754
Manchester Bus Station	0650	0717	0746	0800	0810

- (a) At what time should the 0620 from Wigan arrive at Monton Green? **(1 mark)**
- (b) How long should it take the 0629 bus from Tyldesley to travel to Trafford Road?
(2 marks)

Susan catches a bus in Atherton.
She needs to be in Eccles by 0700.

- (c) What is the time of the latest bus she could catch from Atherton? **(1 mark)**

Question 17

Work out

(a) 563×78 **(3 marks)**

(b) $793 \div 26$ **(3 marks)**

Question 18

6740 people watched a cricket match.

(a) Write the number 6740 in words. **(1 mark)**

(b) Write the number 6740 correct to the nearest hundred. **(1 mark)**

(c) Write down the value of the 7 in the number 6740. **(1 mark)**

Question 19

(a) Write down all the factors of 10. **(2 marks)**

(b) Write down all the prime numbers between 20 and 30. **(2 marks)**

(c) Work out the cube of 6. **(1 mark)**

Question 20

30%, $\frac{1}{4}$, 0.35, $\frac{1}{3}$, $\frac{2}{5}$, 0.299

Write this list of six numbers in order of size.
Start with the smallest number.

(3 marks)