1 £42 is shared equally between 3 friends.

How much does each friend get?

£.....

(Total for Question 1 is 2 marks)

2 Danny buys,

1 loaf of bread for £1.20
1 bottle of milk for 70p
2 packets of cheese for £2.30 each packet

Danny pays with a £10 note.

He says,

"I should get £3.30 change."

Is Danny correct?
You must show how you get your answer.

(Total for Question 2 is 3 marks)

3 Rachel records the temperature in her garden at noon each day.

On Monday, the temperature was 5 °C.
On Tuesday, the temperature was 10 ° less than the temperature on Monday.
On Wednesday, the temperature was 3° greater than the temperature on Tuesday.

Find the difference between the temperature on Monday and the temperature on Wednesday.
You must show all your working.

..... °C

(Total for Question 3 is 2 marks)

4 3 kg of carrots cost £1.80
2 kg of carrots and 5 kg of potatoes cost a total of £3.45

Work out the total cost of 4 kg of carrots and 2 kg of potatoes.
You must show all your working.

£.....

(Total for Question 4 is 4 marks)

5 (a) Work out 3.67×4.2

.....

(3)

(b) Work out $59.84 \div 1.6$

.....

(3)

(Total for Question 5 is 6 marks)

6 On Monday, Sandy pays for 2 plane tickets, 7 nights in a hotel and 2 theme park tickets.

	dollars
each plane ticket	600
each night in a hotel	120
each theme park ticket	250

Show that Sandy pays more than 2500 dollars on Monday.

(Total for Question 6 is 3 marks)

7

Given that

$$2.96 \times 3.2 = 9.472$$

find the value of 29.6×32

.....

(1)

(Total for Question 7 is 1 mark)

8 The table shows the total number of apples sold and the total number of oranges sold in a shop in each of three weeks.

	Week 1	**Week 2**	**Week 3**
Number of apples	86	75	92
Number of oranges	68	80	76

In total for the three weeks, more apples than oranges were sold.
How many more?

.....

(Total for Question 8 is 3 marks)

9. Work out $\dfrac{2.75 \times 14.6}{10 - 1.97}$

.....

(Total for Question 9 is 2 marks)

10 Work out $20 \div (3 + 2)$

.....

(Total for Question 10 is 1 mark)

11 Fay is planning a trip to a theme park for 1 adult and 2 children.

These are the costs for the trip.

Total cost of petrol	£23
Tickets to theme park	£33 each adult £24.50 each child
Meals	£15 each adult £10 each child

Fay has £200 to spend.
She pays all the costs.

How much money does she have left?

£.....

(Total for Question 11 is 4 marks)

12 A shop sells jars of coffee.
Each jar of coffee costs £4

Michael has £23

(a) Work out the greatest number of jars of coffee Michael can buy.

.....

(2)

In a sale on Wednesday, jars of coffee are sold at half price.

Michael thinks that he can now buy exactly twice the number of jars of coffee for £23

(b) Is Michael correct?
You must give a reason for your answer.

.....

.....

.....

(1)

(Total for Question 12 is 3 marks)

13 Elena spent 120 minutes at a sports centre.

She played badminton for 50 minutes.

She used the swimming pool for $\frac{1}{6}$ of the 120 minutes.

She used the gym for 20% of the 120 minutes.
She then spent the rest of the 120 minutes in the cafe.

(a) Work out the total time, in minutes, that Elena spent in the cafe.

..... minutes

(4)

Elena got to the sports centre at 1.30 pm.
She had asked her friend to meet her in the cafe at 3 pm.

(b) Did Elena get to the cafe by 3 pm?
Give a reason for your answer.

.....

.....

.....

(1)

(Total for Question 13 is 5 marks)

14 Myles writes down the distance readings from his car at the start and end of a journey

Start of journey	1	2	4	6	8	miles
End of journey	1	2	8	4	5	miles

Myles knows that the cost of petrol for this journey is 13p per mile.

Work out the total cost of the petrol used for this journey.
Give your answer in pounds.

£.....

(Total for Question 14 is 4 marks)

15 Safiya wants to hire a van.
She uses this rule to work out the cost of hiring a van for a number of days.

Cost = £45 × number of days

Safiya is going to hire the van for 7 days.

Work out the cost.

£.....

(Total for Question 15 is 2 marks)

16 208 bars of chocolate were sold from a shop.

$\frac{1}{4}$ of these bars of chocolate were large bars.
The rest of the bars of chocolate were small bars.

All the large bars of chocolate were sold for £1 each.
All the small bars of chocolate were sold for 60p each.

Work out the total amount of money for which the 208 bars of chocolate were sold.
Give your answer in pounds.

£.....

(Total for Question 16 is 3 marks)

17 Four students play a game.
The table shows the number of points each student has.

Student	Ali	Barbara	Calliope	Danesh
Number of points	143	121	45	19

Barbara has more points than Danesh.

(a) How many more?

.....

(1)

(Total for Question 17 is 1 mark)

18 200 students chose one language to study.
Each student chose one language from French or Spanish or German.

Of the 200 students,

90 are boys and the rest of the students are girls
70 chose Spanish
60 of the 104 students who chose French are boys
18 girls chose German.

Work out how many boys chose Spanish.

.....

(Total for Question 18 is 3 marks)

19 There are 30 women and 20 men at a gym.

The mean height of all 50 people is 167.6 cm
The mean height of the 20 men is 182 cm

Work out the mean height of the 30 women.

..... cm

(Total for Question 19 is 3 marks)

20 Work out $-9 + 5$

.....

(Total for Question 20 is 1 mark)

21 Max sees this special offer in a shop.

> Buy one large plate and get one small plate for half the normal price.

The normal price of a large plate is £2
The normal price of a small plate is 80p

Max wants to buy 6 large plates and 6 small plates using this offer.
He has £15

Has Max got enough money?
You must show how you get your answer.

(Total for Question 21 is 4 marks)

22 A total of 700 tickets were on sale for a football match.

452 of the tickets were sold.

(a) How many tickets were **not** sold?

.....

(2)

For a different football match,

297 tickets were sold for £9.50 each.
399 tickets were sold for £19.50 each.

(b) Work out an estimate for the total amount of money paid for these tickets.
You must show all your working.

£.....

(3)

(c) Is your answer to part (b) an underestimate or an overestimate?
Give a reason for your answer.

.....

.....

.....

(1)

(Total for Question 22 is 6 marks)

23 Work out $\frac{6}{7} \times \frac{5}{12}$

Give your answer as a fraction in its simplest form.

.....

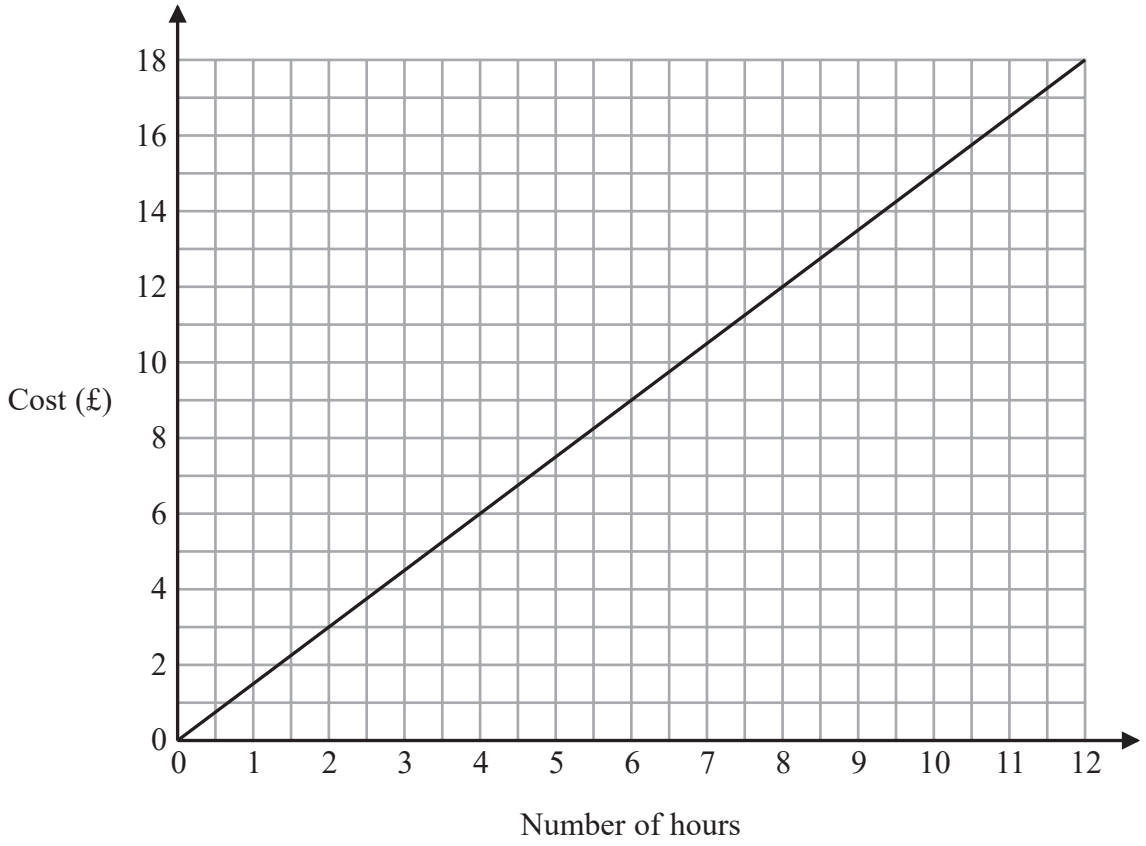
(Total for Question 23 is 2 marks)

24 Work out $8.46 \div 0.15$

.....

(Total for Question 24 is 3 marks)

25 This graph can be used to find the cost of parking a car in a car park for up to 12 hours.



(a) Use the graph to find the cost of parking a car for 4 hours.

£.....

(1)

Justin drives into the car park at 08 00 in the morning.
When he drives out of the car park he has to pay £9

(b) At what time does Justin drive out of the car park?

.....

(3)

(Total for Question 25 is 4 marks)

26 The table shows information about the weights of the people in a hotel lift.

Weight	Number of people
40 kg	1
50 kg	2
60 kg	4
70 kg	5
80 kg	3
90 kg	1

Show that the total weight of the people in the lift is less than 1200 kg.

(Total for Question 26 is 3 marks)

27 Wayne begins walking at 8 30 am.
He walks for 1 hour and 45 minutes.

Wayne then rests for 15 minutes.
He then walks for 85 minutes to a cafe.

Does Wayne get to the cafe before 12 noon?
You must show how you get your answer.

(Total for Question 27 is 4 marks)

28 Gabriel thinks of a number.

He multiplies his number by 5 and then adds 7
His answer is 72

What number did Gabriel think of?

.....

(Total for Question 28 is 3 marks)

29 Jonny wants to know how much coffee he will need for 800 people at a meeting.

Each person who drinks coffee will drink 2 cups of coffee.
10.6 g of coffee is needed for each cup of coffee.

Jonny assumes 68% of the people will drink coffee.

(a) Using this assumption, work out the amount of coffee Jonny needs.
Give your answer correct to the nearest gram.

..... g

(4)

Jonny's assumption is wrong.
72% of the people will drink coffee.

(b) How does this affect your answer to part (a)?

.....

.....

.....

(1)

(Total for Question 29 is 5 marks)

30 Lava flows from a volcano at a constant rate of $11.9\,m^3/s$

How many days does it take for $67\,205\,600\,m^3$ of lava to flow from the volcano?
Give your answer correct to the nearest day.

..... days

(Total for Question 30 is 3 marks)

31 Ryan buys

4 cakes at £1.30 each
2 identical tins of soup.

Ryan pays with a £10 note.
He gets £1.80 change.

How much does Ryan pay for each tin of soup?

£.....

(Total for Question 31 is 4 marks)

32 Here is a number machine.



(a) Work out the output when the input is 13

.....

(1)

(b) Work out the input when the output is 28

.....

(2)

(c) Show that there is a number for which the output is the same as the input.

(2)

(Total for Question 32 is 5 marks)

33 (a) Work out $-12 \div -4$

.....

(1)

(Total for Question 33 is 1 mark)

34 Work out 273×54

(Total for Question 34 is 3 marks)

35 Anil has a job as a driver.
He is paid for each mile he drives.
He is also paid expenses.

One week Anil writes down the distance readings from his car.

Start of week:	4	7	2	4	1	miles
End of week:	4	7	8	7	9	miles

For this week, Anil is paid 47p for each mile he drives.
He is also paid expenses of £80

Work out the total amount that Anil is paid.
Give your answer in pounds.

£.....

(Total for Question 35 is 4 marks)

36 Saira buys 24 bars of chocolate.

$\frac{2}{3}$ of the 24 bars are white chocolate.

The rest of the 24 bars are milk chocolate.

Each milk chocolate bar has a weight of 35 grams.

Work out the total weight of the milk chocolate bars that Saira buys.

..... grams

(Total for Question 36 is 3 marks)

37 On Monday, Lizzie cycled 36 kilometres in 3 hours.

(a) Work out Lizzie's average speed.

..... kilometres per hour

(2)

On Tuesday, Lizzie cycled 36 kilometres at an average speed of 16 kilometres per hour.

Lizzie says that the total time she cycled on Monday and Tuesday was less than 5 hours 20 minutes.

(b) Is Lizzie correct?
You must show how you get your answer.

(3)

(Total for Question 37 is 5 marks)

38 Mrs Simpson organised a school trip for 66 children.

The total cost of the trip was £1800
The school paid 56% of the total cost.
The rest of the total cost was divided equally between the 66 children.

Work out how much money each child paid.

£.....

(Total for Question 38 is 3 marks)

39 Aisha was born in 1993

There was an election in the year of Aisha's 18th birthday.

There is an election every 5 years.

Will there be an election in 2030?
You must show how you get your answer.

(Total for Question 39 is 3 marks)

40 Lucia is going on a skiing holiday.

The cost of ski hire is £26 per day.
The cost of a lift pass is £45 per day.
The cost of ski lessons is £23.50 per hour.

Lucia will pay for

ski hire for 5 days
a lift pass for 4 days
ski lessons for 8 hours.

Lucia has £500

Show that Lucia has enough money to pay for the total cost of ski hire, the lift pass and the ski lessons.

(Total for Question 40 is 3 marks)

41 There are 8 episodes in a TV series.
Each episode lasts 45 minutes.

Work out the total time that the 8 episodes last.
Give your answer in hours.

..... hours

(Total for Question 41 is 2 marks)

42 Habib has two identical tins.

He puts 600 grams of flour into one of the tins.
The flour fills the tin completely.
The density of the flour is 0.6 g/cm^3

Habib puts 600 grams of salt into the other tin.
The salt does **not** fill the tin completely.
The volume of the space in the tin that is **not** filled with salt is 700 cm^3

Work out the density of the salt.
You must show all your working.

..... g/cm^3

(Total for Question 42 is 4 marks)