1   There are only red buttons, yellow buttons and orange buttons in a jar.
The number of red buttons, the number of yellow buttons and the number of orange
buttons are in the ratio $7:4:9$

Work out what percentage of the buttons in the jar are orange.

.... %

(Total for Question   is 2 marks)

2   Harry, Regan and Kelan share £450 in the ratio 2 : 5 : 3

How much money does Kelan get?

£...

(Total for Question   is 2 marks)

3 Kiaria is 7 years older than Jay.
Martha is twice as old as Kiaria.
The sum of their three ages is 77

Find the ratio of Jay's age to Kiaria's age to Martha's age.

....

(Total for Question   is 4 marks)

4   Annie and Lily share some money in the ratio 4 : 3

   (a) What fraction of the money does Lily get?

....

(1)

   Rosie and Dan share some sweets.

   Dan gets $\frac{1}{4}$ of the sweets.

   (b) Write down the ratio of the number of sweets Rosie gets to the number of sweets Dan gets.

....

(1)

(Total for Question   is 2 marks)

5   The table shows a cricket club's income in 2016 from a fete, a quiz and membership fees.

		Income
Fete		£250
Quiz	Entry fees Refreshments	13 at £5 each £35
Membership fees		25 at £20 each

   Express as a ratio

      the income from the fete to the income from the quiz to the income from membership fees.

   Give your ratio in its simplest form.

....

(Total for Question   is 3 marks)

6 The ratio of the cost of one metre of cotton fabric to the cost of one metre of silk fabric is 2 : 5

Complete the table of costs.

	2 m	6 m	8 m	9 m
cotton fabric	£6			
silk fabric				

(Total for Question   is 3 marks)

7 There are some chocolates in a box.

$\frac{1}{4}$ of the chocolates contain nuts.

The rest of the chocolates do not contain nuts.

Write down the ratio of the number of chocolates that contain nuts to the number of chocolates that do not contain nuts.
Give your answer in the form 1 : n

(Total for Question   is 2 marks)

8 In a village

the number of houses and the number of flats are in the ratio 7 : 4
the number of flats and the number of bungalows are in the ratio 8 : 5

There are 50 bungalows in the village.

How many houses are there in the village?

....

(Total for Question   is 3 marks)

9 Alan, Bispah and Chan share a sum of money.

Alan gets $\frac{1}{8}$ of the money.

Bispah gets $\frac{1}{2}$ of the money.

Chan gets the rest of the money.

Alan gets £2.50

(a) Work out how much money Bispah gets.

£...
(2)

(b) Find the ratio

              amount of money Alan gets : amount of money Chan gets

Give your answer in the form $a : b$ where a and b are whole numbers.

....
(3)

(Total for Question   is 5 marks)
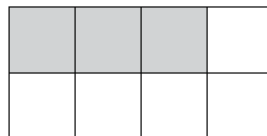
10   Azmol, Ryan and Kim each played a game.

Azmol's score was four times Ryan's score.
Kim's score was half of Azmol's score.

Write down the ratio of Azmol's score to Ryan's score to Kim's score.

....

(Total for Question   is 2 marks)

11   Here is a grid of squares.

Write down the ratio of the number of shaded squares to the number of unshaded squares.

....

(Total for Question   is 1 mark)

12 In a bag there are only red counters, blue counters, green counters and yellow counters.
A counter is taken at random from the bag.

The table shows the probabilities of getting a red counter or a yellow counter.

Colour	red	blue	green	yellow
Probability	0.4			0.25

the number of blue counters : the number of green counters = 3 : 4

Complete the table.

(Total for Question   is 4 marks)

13 (a) A bag contains red counters and blue counters only.

number of red counters : number of blue counters = 3 : 4

Write down the fraction of the counters that are red.

....

(1)

(b) Write the ratio $12 : 30$ in the form $1 : n$

....

(2)

(Total for Question   is 3 marks)

14 Jamil makes a drink by mixing
            1 part of orange squash with 9 parts of water.

He uses 750 millilitres of orange squash.

Jamil is going to put the drink he has mixed into 1 litre bottles.

Work out the greatest number of 1 litre bottles that Jamil can completely fill.

(Total for Question   is 3 marks)

15 Adam, Linda and Rytis share an amount of money.

Linda gets three times as much money as Rytis gets.
Linda gets half as much money as Adam gets.

What fraction of the amount of money does Linda get?

(Total for Question   is 2 marks)

16   Pens and pencils are sold in a shop.

12 pencils cost £1.80

The ratio of the cost of a pen to the cost of a pencil is $7:3$

Work out the cost of 5 pens.

£...

(Total for Question   is 4 marks)

17   Carlo puts tins into small boxes and into large boxes.

He puts 6 tins into each small box.
He puts 20 tins into each large box.

Carlo puts a total of 3000 tins into the boxes so that

number of tins in small boxes : number of tins in large boxes $= 2 : 3$

Carlo says that less than 30% of the boxes filled with tins are large boxes.

Is Carlo correct?
You must show all your working.

(Total for Question   is 5 marks)