

Year 10 Foundation

- Ratio

Q1

Write down the ratio of 450 grams to 15 grams.

Give your answer in its simplest form.

Q2.

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

	Income	
Fete		£250
Quiz	Entry fees	13 at £5 each
	Refreshments	£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 2 marks)

.....
(Total for Question is 3 marks)

Q3.

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.

Q4.

Ali and Beth divide £280 in the ratio 2 : 5

Work out how much each person gets.

Ali £

Beth £

.....
(Total for Question is 2 marks)

.....
(Total for Question is 2 marks)

Q5.
 There are 60 people in a choir.
 Half of the people in the choir are women.
 The number of women in the choir is 3 times the number of men in the choir.
 The rest of the people in the choir are children.
 the number of children in the choir : the number of men in the choir = $n : 1$
 Work out the value of n .
 You must show how you get your answer.

$n = \dots\dots\dots$
(Total for Question is 4 marks)

Q6.
 Ali, Ben and Cathy share an amount of money in the ratio 6 : 9 : 10
 What fraction of the money does Ben get?

$\dots\dots\dots$
(Total for Question is 2 marks)

Q7.
 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.

$\dots\dots\dots$ %
(Total for Question is 2 marks)

Q8.
 £360 is shared between Abby, Ben, Chloe and Denesh.
 The ratio of the amount Abby gets to the amount Ben gets is 2 : 7
 Chloe and Denesh each get 1.5 times the amount Abby gets.
 Work out the amount of money that Ben gets.

£ $\dots\dots\dots$
(Total for Question is 4 marks)

Q9.
 Frank, Mary and Seth shared some sweets in the ratio 4 : 5 : 7.
 Seth got 18 more sweets than Frank.
 Work out the total number of sweets they shared.

.....
(Total for Question is 3 marks)

Q10.
 There are only blue pens, green pens and red pens in a box.
 The ratio of the number of blue pens to the number of green pens is 2 : 5.
 The ratio of the number of green pens to the number of red pens is 4 : 1
 There are less than 100 pens in the box.
 What is the greatest possible number of red pens in the box?

.....
(Total for Question is 3 marks)

Q11.
 Tom and Adam have a total of 240 stamps.
 The ratio of the number of Tom's stamps to the number of Adam's stamps is 3 : 7
 Tom buys some stamps from Adam.
 The ratio of the number of Tom's stamps to the number of Adam's stamps is now 3 : 5
 How many stamps does Tom buy from Adam?
 You must show all your working.

.....
(Total for Question is 4 marks)

Q12.
 Costcorp sells packets of mints to shop owners.
 On Monday three shop owners buy mints from Costcorp.
 Each shop owner buys small packets, medium packets and large packets of mints.
 Alan buys 400 packets of mints.
 32 % are small packets.
 40 % are large packets.
 Beryl buys 500 packets of mints.
 $\frac{3}{10}$ are small packets.
 $\frac{1}{10}$ are large packets.
 Charlie buys 150 small packets of mints so that number of small packets : number of medium packets = 3 : 4
 Work out the total number of medium packets of mints these shop owners buy.
 You must show all your working.

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(Total for Question is 5 marks)