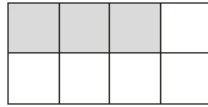


Writing and Simplifying Ratio Past Paper Questions



Q1.

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 = 1 mark)

Q2.

There are 28 red pens and 84 black pens in a bag.

Write down the ratio of the number of red pens to the number of black pens.

Give your ratio in its simplest form.

.....

(Total for question is 2 marks)

Q3.

Write down the ratio of 450 grams to 15 grams.

Give your answer in its simplest form.

.....

(Total for question = 2 marks)

Q4.

A farmer has 20 boxes of eggs.

There are 6 eggs in each box.

Write, as a ratio, the number of eggs in two boxes to the total number of eggs.

Give your answer in its simplest form.

.....

(Total for question = 2 marks)



Q5.

There are only red counters and blue counters in a bag.
The ratio of the number of red counters to the number of blue counters is 4 : 6

(a) Write this ratio in its simplest form.

.....
(1)

A counter is to be taken at random from the bag.

(b) Write down the probability that the counter will be blue.

.....
(2)

(Total for question = 3 marks)

Q6.

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 = 2 marks)

Q7.



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

$$\text{number of red counters} : \text{number of blue counters} = 3 : 4$$

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 = 3 marks)

Q8.

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 = 3 marks)



Q9.

There are 20 red counters and 15 blue counters in a bag.

- (a) Write down the ratio of the number of red counters to the number of blue counters.
Give your ratio in its simplest form.

.....
(2)

There are only red counters and blue counters in the bag.

x red counters are taken from the bag.

y blue counters are taken from the bag.

- (b) Write down an expression, in terms of x and y , for the total number of counters now in the bag.

.....
(2)

(Total for question = 4 marks)

Q10.

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.

$n =$

(Total for question = 4 marks)



Q11.

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 = 2 marks)