

Ratio Problems

For Pearson Edexcel GCSE Mathematics (1MA1) • Foundation tier

Name _____

Total marks: **21**

Answer **all** questions in the spaces provided. Show your working: marks are given for correct method.

- 1** A garden has only daffodils and tulips.
The ratio of the number of daffodils to the number of tulips is 4 : 7
What fraction of the flowers are tulips?

.....
(1)

(Total for Question 1 is 1 mark)

- 2** A jar contains only red marbles and yellow marbles.
 $\frac{3}{5}$ of the marbles are yellow.
Write down the ratio of the number of red marbles to the number of yellow marbles.

.....
(1)

(Total for Question 2 is 1 mark)

- 3** A school orchestra has only string players, wind players and percussion players.
The numbers of string players, wind players and percussion players are in the ratio
8 : 5 : 2

(a) What fraction of the players are wind players?

.....
(1)

(b) There are 18 more string players than percussion players.
Work out the total number of players in the orchestra.

.....
(2)
(Total for Question 3 is 3 marks)

- 4** A garden centre sells only roses and lilies.
The ratio of the number of roses to the number of lilies is 7 : 3
30% of the roses are white.
60% of the lilies are white.

What percentage of all the flowers are white?

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

- 5 $p:q = 3:4$ and $q:r = 10:7$
Find $p:q:r$
Give your answer in its simplest form.

.....
(2)

(Total for Question 5 is 2 marks)

- 6 Nia, Tomas and Kavi share £400 in the ratio 2 : 3 : 5
Kavi then gives some of his money to Nia.
Nia and Kavi now have the same amount of money.

Work out the ratio of the amounts Nia, Tomas and Kavi have now.
Give your answer in its simplest form.

.....
(4)

(Total for Question 6 is 4 marks)

- 7** In a bowl, the ratio of apples to pears is 3 : 5
There are 12 apples in the bowl.
Sam puts 4 more apples in the bowl.

Find the new ratio of apples to pears.
Give your answer in its simplest form.

.....
(3)

(Total for Question 7 is 3 marks)

- 8** The ratio of Tia's age to Ken's age is 3 : 5
In 6 years' time, the ratio of Tia's age to Ken's age will be 3 : 4

How old is Ken now?

.....
(3)

(Total for Question 8 is 3 marks)
