

N164 Ratio 2

Q1.

Anna and Bill share some money in the ratio 2 : 5

Anna gets £ A

Bill gets £ B

Carl and Donna share twice as much money as Anna and Bill share.

They share the money in the ratio 3 : 1

Carl gets £ C

Donna gets £ D

Find $A : B : C : D$

Give your answer in its simplest form.

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(Total for question = 3 marks)

Q2.

On a farm

the number of cows and the number of sheep are in the ratio 6 : 5
the number of sheep and the number of pigs are in the ratio 2 : 1

The total number of cows, sheep and pigs on the farm is 189

How many sheep are there on the farm?

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(Total for question = 3 marks)

Q3.

The points A , B , C and D lie in order on a straight line.

$$AB : BD = 1 : 5$$
$$AC : CD = 7 : 11$$

Work out $AB : BC : CD$

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(Total for question = 3 marks)

Q4.

Given that

$$a : b = 8 : 5 \quad \text{and} \quad b : c = 3 : 4$$

find the ratio

$$a : b : c$$

Give your answer in its simplest form.

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(Total for question = 3 marks)

Q5.

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?

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(Total for question = 3 marks)

Q6.

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?

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(Total for question = 3 marks)

Q7.

There are some small cubes and some large cubes in a bag.
The cubes are red or the cubes are yellow.

The ratio of the number of small cubes to the number of large cubes is 4 : 7

The ratio of the number of red cubes to the number of yellow cubes is 3 : 5

(a) Explain why the least possible number of cubes in the bag is 88

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(1)

All the small cubes are yellow.

(b) Work out the least possible number of large yellow cubes in the bag.

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(3)

(Total for question = 4 marks)