Ratios Past Paper Questions Edexcel Maths IGCSE -Higher

1.

(a) There are 32 students in a class.
All the students are either left-handed or right-handed.
The ratio of the number of left-handed students to the number of right-handed students is 1 : 7

Work out the number of right-handed students.

.... (2)

(b) Sajid makes a scale model of a lorry.
He uses a scale of 1 : 32
The length of Sajid's model lorry is 45 cm.
Chitra makes a scale model of the same lorry.
She uses a scale of 1 : 72

Work out the length of Chitra's model lorry.

.... cm
(3)

2.

Jack, Kate and Lila share some money in the ratios 5 : 9 : 6
In total, Jack and Kate receive £56

Work out the amount of money Lila receives.

£................................

3.

On a map, 4 centimetres represents a real distance of 1 kilometre.

(a) On the map, the distance between two points is 14 cm.
Work out the real distance between these two points.
Give your answer in kilometres.

.... km
(2)

(b) Work out the scale of the map in the form $1 : n$

1 : ....

4.

A school has 840 pupils and 40 teachers.

(a) Find the ratio of the number of pupils to the number of teachers.
Give your ratio in the form $n : 1$

.... : 1

(2)

In Year 11 at the school, the ratio of the number of pupils who study Chemistry to the number of pupils who study Physics is 3 : 2

(b) 105 pupils in Year 11 study Chemistry.
Work out the number of pupils in Year 11 who study Physics.

....

(2)

For the 105 pupils who study Chemistry, the ratio of the number of boys to the number of girls is 4 : 3

(c) Work out the number of girls in Year 11 who study Chemistry.

....

(2)

5.

Lisa, Max and Punita share £240 in the ratio 3 : 4 : 8
How much more money than Lisa does Punita get?

£ ....

6.

Here is a list of ingredients needed to make 16 cookies.

Ingredients for 16 cookies
120 g butter
150 g sugar
240 g flour
170 g chocolate
1 egg

Max wants to make 40 cookies.

(a) How much flour does Max need?

.... g

(2)

Abby made cookies to sell at a school fair.
She used 600 g of butter.

(b) How many cookies did she make?

....

(2)

(c) Find the ratio of the weight of sugar to the weight of flour in the list of ingredients.
Give your answer in the form 1: n

1 : ....

(2)

7.

A bag contains only red marbles and green marbles.
The bag contains a total of 400 marbles.
The ratio of the number of red marbles to the number of green marbles is 5 : 3

How many more red marbles are there than green marbles in the bag?

....

8.

A plane has a length of 73 metres.

A scale model is made of the plane.
The scale of the model is 1 : 200

Work out the length of the scale model.
Give your answer in centimetres.

cm