GCSE MATHEMATICS
AQA | Edexcel | OCR I WJEC

## Ratio (Foundation)

Please write clearly in block capitals

Forename:

Surname:

## Materials

For this paper you must have:

- mathematical instruments

You can use a calculator.

## Instructions

- Use black ink or black ball-point pen. Draw diagrams in pencil.
- Fill in the boxes at the top of this page.
- Answer all questions.
- You must answer the questions in the spaces provided. Do not write outside the box around each page or on blank pages.
- Do all rough work in this book. Cross through any work you do not want to be marked.


## Information

- The marks for questions are shown in brackets.
- You may ask for graph paper, tracing paper and more answer paper. These must be tagged securely to this answer book.


## Advice

- In all calculations, show clearly how you work out your answer.

1(a) If the ratio of $x: y$ is $6: 11$, and $x=27$, what is the value of $y$ ?

32
33
49.5

55

1(b) If 200 grams of one ingredient is used in a recipe, which calls for a ratio of $4: 7$ with a second ingredient, how much of the second ingredient is needed?

280 grams
350 grams
1400 grams

1(c) In a class of 42 students, the ratio of male : female is $2: 4$.
How many females are there?

14
28
40
42

2 Consider the following table:

| $x$ | $y$ |
| :---: | :---: |
| 12 | 28 |
| 21 | 49 |
| 36 | 84 |
| 51 | 133 |

2(a) Complete the table for the missing values.
$\qquad$
$\qquad$
Answer $\qquad$

2(b) Express the ratio $x: y$ in simplest form.
$\qquad$
$\qquad$
$\qquad$
Answer $\qquad$
There are 200 medals bought for a sports celebration.
The ratio of winning medals to participation medals is $1: 4$.
3(a) How many of each of the winning and participation medals are there?
$\qquad$
$\qquad$
$\qquad$
$\qquad$
Answer $\qquad$
3(b) An additional 40 medals are purchased.
The ratio of winning medals to participation medals remains at 1:4.
Find the number of winning and participation medals there would be after the 40 medals are added.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
Answer


## GCSE Maths Revision Guide

() GCSE Maths Course 9-1 Revision Guide
() Exam Questions Included
() All exam boards - AQA, OCR, Edexcel, WJEC
() Suitable for higher and foundation tiers
Get it at mme.la/guide or scan the barcode

4 Terry, Alisha and Ella run on a weekly basis.
In total, they average 176 km a week.
If Alisha runs twice as far as Terry and Ella runs one third of Alisha's distance, how far do each of them run?
$\qquad$
$\qquad$
$\qquad$
$\qquad$
Answer $\qquad$

5 A construction company needs workers for a job.
The ratio of general labour to management is $8: 1$
The budget for each general labourer is $£ 2,500$ and $£ 8,200$ for each management employee.

There are 32 general labourers employed.
How much is spent on all the employees for the job?
$\qquad$
$\qquad$
$\qquad$
$\qquad$
Answer $\qquad$


9 There are 24 people working in a kitchen,
4 men below the age of 18
4 women below the age of 18 ,
8 women above the age of 18
8 men above the age of 18

9(a) What proportion of the people in the kitchen were male?
Give your answer as a fraction in its simplest form.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
Answer $\qquad$

9(b) Find the ratio of women below the age of 18, compared to the total numbers of workers in the kitchen.

Give your answer in its simplest form.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
Answer $\qquad$

End of Questions

