

## 1MA1 Foundation themed papers: Recipes

Write your name here			
Surname	Other names		
Centre Number		Candidate Number	
Pearson Edexcel Level 1/Level 2 GCSE (9–1)			
<b>Mathematics</b>			
Recipes			
			Paper Reference <b>1MA1</b>
You must have: Ruler graduated in centimetres and millimetres, protractor, pair of compasses, pen, HB pencil, eraser, calculator. Tracing paper may be used.			Total Marks

### Instructions

- Use **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Answer **all** questions.
- Answer the questions in the spaces provided – *there may be more space than you need.*
- You must **show all your working.**
- Diagrams are **NOT** accurately drawn, unless otherwise indicated.
- If your calculator does not have a  $\pi$  button, take the value of  $\pi$  to be 3.142 unless the question instructs otherwise.

### Information

- The total mark for this paper is **21**. There are **6** questions.
- Questions have been arranged in an ascending order of mean difficulty, as found by all students in the June 2017–November 2019 examinations.
- The marks for **each** question are shown in brackets – *use this as a guide as to how much time to spend on each question.*

### Advice

- Read each question carefully before you start to answer it.
- Keep an eye on the time.
- Try to answer every question.
- Check your answers if you have time at the end.

**1MA1 Foundation themed papers: Recipes**



**1** Deon needs 50 g of sugar to make 15 biscuits.

She also needs

three times as much flour as sugar

two times as much butter as sugar

Deon is going to make 60 biscuits.

(a) Work out the amount of flour she needs.

..... g  
**(3)**

Deon has to buy all the butter she needs to make 60 biscuits.

She buys the butter in 250 g packs.

(b) How many packs of butter does Deon need to buy?

.....  
**(2)**

**(Total for Question 2 is 5 marks)**

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## 1MA1 Foundation themed papers: Recipes

- 2 Here is the list of ingredients for making 30 biscuits.

Ingredients for 30 biscuits	
225 g	butter
110 g	caster sugar
275 g	plain flour
75 g	chocolate chips

Lucas has the following ingredients.

- 900 g butter
- 1000 g caster sugar
- 1000 g plain flour
- 225 g chocolate chips

What is the greatest number of biscuits Lucas can make?  
You must show your working.

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

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**1MA1 Foundation themed papers: Recipes**



**3** Here is a list of ingredients for making 16 flapjacks.

**Ingredients for 16 flapjacks**

- 120 g butter
- 140 g brown sugar
- 250 g oats
- 2 tablespoons syrup

Jenny wants to make 24 flapjacks.

Work out how much of each of the ingredients she needs.

butter ..... g

brown sugar ..... g

oats ..... g

syrup ..... tablespoons

**(Total for Question 4 is 3 marks)**

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4 Here are the ingredients needed to make 16 biscuits.

<p style="text-align: center;"><b>Biscuits</b></p> <p style="text-align: center;">Ingredients to make <b>16</b> biscuits</p> <p style="text-align: center;">175 g of butter 75 g of sugar 250 g of flour</p>
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Anna has  
500 g of butter  
300 g of sugar  
625 g of flour

Work out the greatest number of biscuits Anna can make.

.....  
**(Total for Question 5 is 3 marks)**

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**1MA1 Foundation themed papers: Recipes**

 **5** Shahid is going to use these instructions to make a fizzy drink.

Mix 5 parts of orange juice  
with 2 parts of lemonade

Shahid thinks that he has 300 ml of orange juice and 200 ml of lemonade.

(a) If Shahid is correct, what is the greatest amount of fizzy drink he can make?

..... ml  
**(3)**

Shahid has 300 ml of orange juice but he only has 160 ml of lemonade.

(b) Does this affect the greatest amount of fizzy drink he can make?  
Give a reason for your answer.

.....  
.....  
.....

**(1)**

**(Total for Question 6 is 4 marks)**

## 1MA1 Foundation themed papers: Recipes

- 6 Adrian is going to make concrete.  
He is going to use

180 kg of cement  
375 kg of sand  
1080 kg of stone

Cement, sand and stone are sold in bags.

1 bag cement	1 bag sand	1 bag stone
25 kg	22.5 kg	50 kg

Adrian already has

10 bags of cement  
20 bags of sand  
20 bags of stone

Work out what bags he needs to buy to make the concrete.

**(Total for Question 1 is 3 marks)**

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**TOTAL MARKS FOR PAPER: 21**