Name	Class

MATHS TEACHER HUB
www.MathsTeacherHub.com

Recipes
(9 – 1) Topic booklet
Foundation

These questions have been collated from previous years GCSE Mathematics papers.

You must have: Ruler graduated in centimetres and millimetres, protractor, pair of compasses, pen, HB pencil, eraser.

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*.
•Diagrams are NOT accurately drawn, unless otherwise indicated.
•You must **show all your working out.**
•If the question is a **1F** question you are not allowed to use a calculator.
•If the question is a **2F** or a **3F** question, you may use a calculator to help you answer.

Information
•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.

Answer ALL questions
Write your answers in the space provided.
You must write down all the stages in your working.

10 Here are the ingredients needed to make 20 peanut butter cookies.

Makes 20 cookies
250 g peanut butter
200 g sugar
2 small eggs

Derek wants to make 60 cookies.

He has 900 g of peanut butter.

Does Derek have enough peanut butter to make 60 cookies?
You must show how you get your answer.

November 2023 – Paper 1F   **(Total for Question 10 is 3 marks)**

15 Here is a list of ingredients for making chocolate mousse for 2 people.

> **Chocolate mousse
> for 2 people**
>
> 40 grams sugar
> 110 grams dark chocolate
> 2 eggs
> $\frac{1}{4}$ teaspoon lemon juice

Ellie has 250 grams of sugar and 550 grams of dark chocolate.
She assumes that she has plenty of lemon juice and plenty of eggs.

(a) What is the greatest number of people Ellie can make chocolate mousse for?
   You must justify your answer.

(3)

Ellie only has 6 eggs.

(b) What effect would this have on the greatest number of people Ellie can make
   chocolate mousse for?

....

....

(1)

(Total for Question 15 is 4 marks)

16 Here is the list of ingredients for making 20 biscuits.

> Ingredients for 20 biscuits
>
> 150 g butter
> 100 g sugar
> 250 g flour

Harry wants to make 60 biscuits.

How much flour does Harry need?

.... g

(Total for Question 16 is 2 marks)

17 Here are the ingredients needed to make 20 shortbread biscuits.

> **Ingredients for 20 shortbread biscuits**
>
> 120 g   of butter
> 200 g   of flour
> 50 g   of sugar

Heidi wants to make 30 shortbread biscuits.

How much of each ingredient will Heidi need?

butter .... g

flour .... g

sugar .... g

(Total for Question 17 is 3 marks)

17 Heidi wants to make some biscuits using this recipe.

Makes 12 biscuits

125 g butter
200 g flour
50 g sugar

Heidi thinks that she has,

500 g butter
700 g flour
250 g sugar

Assuming that these weights are correct,

(a) work out the greatest number of biscuits Heidi can make.
You must show all your working.

....

(4)

Heidi is wrong.
She has more than 250 g of sugar.

(b) Does this affect the greatest number of biscuits Heidi can make?
Give a reason for your answer.

....

....

....

(1)

(Total for Question 17 is 5 marks)

17 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 17 is 3 marks)

18 Here is a list of ingredients for making 10 scones.

> **Ingredients for 10 scones**
>
> 75 g   butter
> 350 g   self-raising flour
> 40 g   sugar
> 150 m*l*   milk
> 2   eggs

Mia wants to make 25 scones.
Work out how much sugar she needs.

.... g

(Total for Question 18 is 2 marks)

18 Here is a list of ingredients for making 16 mince pies.

> **Ingredients for 16 mince pies**
>
> 240 g of butter
> 350 g of flour
> 100 g of sugar
> 280 g of mincemeat

Elaine wants to make 72 mince pies.

How much of each ingredient will Elaine need?

butter .... g

flour .... g

sugar .... g

mincemeat .... g

(Total for Question 18 is 3 marks)

19 Here are the ingredients needed to make 16 biscuits.

> **Biscuits**
>
> Ingredients to make **16** biscuits
>
> 175 g of butter
> 75 g of sugar
> 250 g of flour

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 19 is 3 marks)

19 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 19 is 3 marks)

19 Jane made some almond biscuits which she sold at a fete.

She had:
5 kg of flour
3 kg of butter
2.5 kg of icing sugar
320 g of almonds

Here is the list of ingredients for making 24 almond biscuits.

Ingredients for 24 almond biscuits

150 g flour
100 g butter
75 g icing sugar
10 g almonds

Jane made as many almond biscuits as she could, using the ingredients she had.

Work out how many almond biscuits she made.

....

(Total for Question 19 is 3 marks)

20 Here is a list of ingredients for making 10 scones.

> **Ingredients for 10 scones**
>
> 80 g butter
> 350 g self-raising flour
> 30 g sugar
> 2 eggs

Martin has

> 100 g butter
> 1 kg self-raising flour
> 50 g sugar
> 4 eggs

Martin wants to make 25 scones.
He has not got enough of some of the ingredients.

Work out how much more of each of these ingredients he needs.

(Total for Question 20 is 4 marks)

23 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 23 is 5 marks)