Edexcel GCSE
Mathematics (Linear) – 1MA0

PROPORTION

Materials required for examination
Ruler graduated in centimetres and millimetres, protractor, compasses, pen, HB pencil, eraser.
Tracing paper may be used.

Items included with question papers
Nil

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.
Calculators may be used.

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.
Questions labelled with an **asterisk** (*) are ones where the quality of your written communication will be assessed – you should take particular care on these questions with your spelling, punctuation and grammar, as well as the clarity of expression.

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.

1. Here is a list of ingredients for making **10** Flapjacks.

Ingredients for 10 Flapjacks
80 g rolled oats
60 g butter
30 m*l* golden syrup
36 g light brown sugar

Work out the amount of each ingredient needed to make **15** Flapjacks.

..... g rolled oats

..... g butter

..... m*l* golden syrup

..... g light brown sugar

(Total 3 marks)

2. Fred has a recipe for 30 biscuits.

Here is a list of ingredients for 30 biscuits.

Self-raising flour	: 230g
Butter	: 150g
Caster sugar	: 100g
Eggs	: 2

Fred wants to make 45 biscuits.

(a) Complete his new list of ingredients for 45 biscuits.

Self-raising flour	:……
Butter	: ……
Caster sugar	: ……
Eggs	: ……

(3)

Gill has only 1 kilogram of self-raising flour. She has plenty of the other ingredients.

(b) Work out the maximum number of biscuits that Gill could bake.

.....

(3)

(6 marks)

3. Here are the ingredients needed to make 16 gingerbread men.

Ingredients to make **16** gingerbread men	
180 g	flour
40 g	ginger
110 g	butter
30 g	sugar

Hamish wants to make 24 gingerbread men.
Work out how much of each of the ingredients he needs.

.....g flour

.....g ginger

.....g butter

.....g sugar

(3 marks)

4. Here are the ingredients needed to make 12 shortcakes.

Shortcakes

Makes **12** shortcakes

50 g	of sugar
200 g	of butter
200 g	of flour
10 m*l*	of milk

Liz makes some shortcakes.
She uses 25 m*l* of milk.

(a) How many shortcakes does Liz make?

.....
(2)

Robert has 500 g of sugar
1000 g of butter
1000 g of flour
500 m*l* of milk

(b) Work out the greatest number of shortcakes Robert can make.

.....
(2)

(4 marks)

5. Here is a list of ingredients for making 12 small cakes.

Ingredients for 12 small cakes
180 g margarine
180 g sugar
200 g plain flour
1 teaspoon baking powder
2 eggs

Joe is going to make 24 of the small cakes.

(a) Work out how much margarine he needs.

(2)

..... g

Sharon is going to make 18 of the small cakes.

(b) Work out how much flour she needs.

(2)

..... g

(Total for Question 4 = 4 marks)

***6.** This is a list of ingredients for making a pear & almond crumble for 4 people.

Ingredients for 4 people:
80 g plain flour
60 g ground almonds
90 g soft brown sugar
60 g butter
4 ripe pears

Jessica wants to make a pear & almond crumble for 10 people.

Here is a list of the amount of each ingredient Jessica has in her cupboard.

250 g plain flour
100 g ground almonds
200g soft brown sugar
150 g butter
8 ripe pears

Work out which ingredients Jessica needs to buy more of.
You must show all of your working.

(4 marks)

***7.** 225 grams of flour are needed to make 9 cakes.

Marian wants to make 20 of these cakes.
She has 475 grams of flour.

Does Marian have enough flour to make 20 cakes?
You must show all your working.

(3 marks)