

# 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

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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

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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

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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 ml golden syrup

36 g light brown sugar

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

..... g rolled oats

..... g butter

..... ml golden syrup

..... g light brown sugar

**(Total 3 marks)**

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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)

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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)**

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

Shortcakes	
Makes <b>12</b> shortcakes	
50 g	of sugar
200 g	of butter
200 g	of flour
10 ml	of milk

Liz makes some shortcakes.  
She uses 25 ml 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 ml of milk

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

.....  
(2)

**(4 marks)**

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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)

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**\*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)**

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**\*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)**

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