Write your name here

Surname	Other names

Edexcel GCSE

Centre Number	Candidate Number

Mathematics B

Unit 2: Number, Algebra, Geometry 1 (Non-Calculator)

Foundation Tier

Friday 14 June 2013 – Morning
Time: 1 hour 15 minutes

Paper Reference
5MB2F/01

You must have: Ruler graduated in centimetres and millimetres, protractor, pair of compasses, pen, HB pencil, eraser. 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.*
- **Calculators must not be used.**

Information

- The total mark for this paper is 60
- 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.

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.

Turn over ▶

P43613A

©2013 Pearson Education Ltd.

6/6/6/

P 4 3 6 1 3 A 0 1 2 0

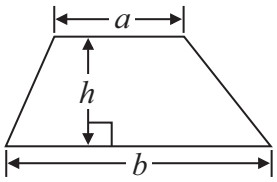
PEARSON

GCSE Mathematics 2MB01

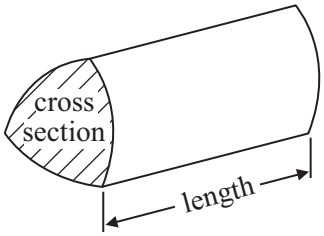
Formulae: Foundation Tier

You must not write on this formulae page.
Anything you write on this formulae page will gain NO credit.

Area of trapezium = $\frac{1}{2}(a + b)h$



Volume of prism = area of cross section × length



Answer ALL questions.

Write your answers in the spaces provided.

You must write down all stages in your working.

You must NOT use a calculator.

1 (a) Write the number 3460 in words.

.....

(1)

(b) Write the number 258 correct to the nearest hundred.

.....

(1)

(c) Write these numbers in order of size.
Start with the smallest number.

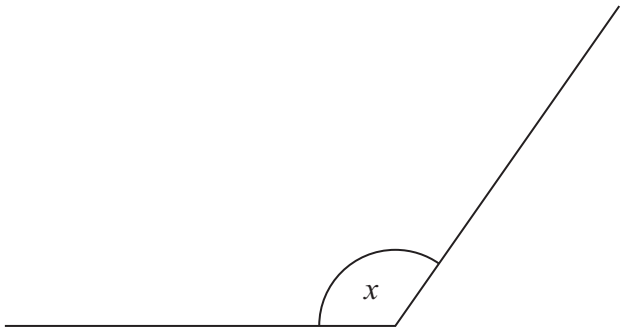
6.37 6.5 6.48 6.04 6.59

.....

(1)

(Total for Question 1 is 3 marks)

2



(a) Write down the special name for the angle marked x.

.....

(1)

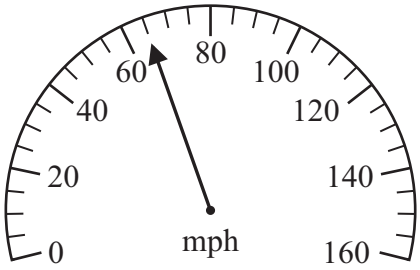
(b) Measure the size of the angle marked x.

.....°

(1)

(Total for Question 2 is 2 marks)

3



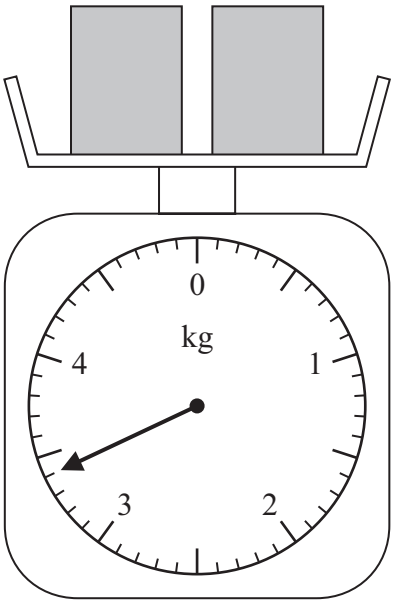
The diagram shows the speed of a car.

(a) Write down the speed.

..... mph

(1)

The diagram shows two boxes on some scales.



Each box has the same weight.

(b) Work out the weight of each box.

..... kg

(2)

(Total for Question 3 is 3 marks)

4 The table shows the minimum temperature on each of six days in January.

	Mon	Tues	Wed	Thurs	Fri	Sat
Minimum temperature	5 °C	–1 °C	–2 °C	–3 °C	–3 °C	–4 °C

(a) Write down the lowest temperature.

..... °C

(1)

(b) Work out the difference between the temperature on Tuesday and the temperature on Saturday.

..... °C

(1)

On Sunday, the temperature was 8 °C higher than the temperature on Saturday.

(c) Work out the temperature on Sunday.

..... °C

(1)

(Total for Question 4 is 3 marks)

---

5 (a) Simplify $y + y + y + y$

.....

(1)

(b) Simplify $c \times d \times 5$

.....

(1)

(c) Simplify $2a + 4b + 3a - b$

.....

(2)

(Total for Question 5 is 4 marks)

6 (a) Write down the value of $\sqrt{49}$

.....

(1)

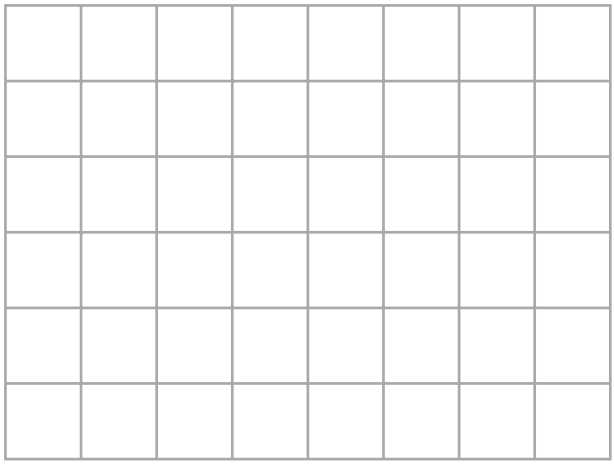
(b) Write down the cube of 3

.....

(1)

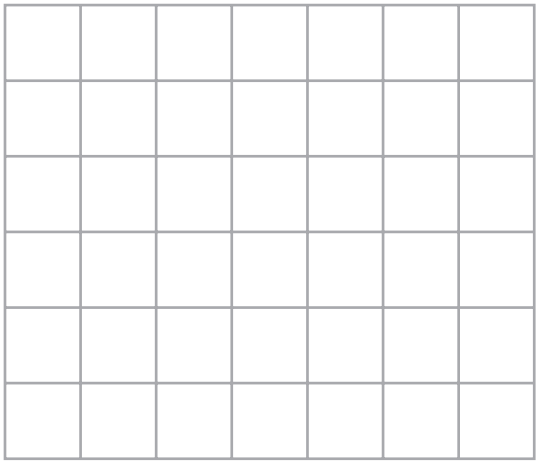
(Total for Question 6 is 2 marks)

7 (a) On the grid of centimetre squares, draw an isosceles triangle.



(1)

(b) On the grid of centimetre squares, draw a rectangle with a perimeter of 10 cm.



(2)

(Total for Question 7 is 3 marks)

8 The table gives information about the cost of cinema tickets.

Cinema tickets	Before 5pm	5pm and after
adult ticket	£6.35	£7.55
child ticket (ages 2 – 12)	£4.75	£5.65
teen ticket (ages 13 – 18)	£5.05	£6.05
family ticket (for 4 people)	£19.00	£22.60

Mr and Mrs White have 2 children.
One child is aged 10
The other child is aged 14

Mr and Mrs White and their 2 children go to the cinema **after** 5pm.

It is cheaper for Mr and Mrs White to buy 1 family ticket than to buy 4 separate tickets.

How much cheaper?

£.....

(Total for Question 8 is 4 marks)

9 (a) Write 0.7 as a fraction.

.....

(1)

(b) Write 0.3 as a percentage.

.....%

(1)

(c) Write $\frac{8}{12}$ in its simplest form.

.....

(1)

(Total for Question 9 is 3 marks)

10 Here is part of a train timetable from Stamford to Stansted Airport.

Stamford	08 59	09 59	10 59	11 59
Peterborough	09 18	10 18	11 18	12 18
Ely	09 53	10 53	11 53	12 53
Cambridge	10 08	11 08	12 08	13 08
Stansted Airport	10 45	11 45	12 45	13 45

A train leaves Stamford at 08 59

(a) At what time should this train get to Cambridge?

.....

(1)

David gets to Ely station at 10 25
He wants to catch a train to Cambridge.

(b) How many minutes should David have to wait?

..... minutes

(1)

Janet needs to get to Stansted Airport **before** 13 00
She is going to catch a train from Peterborough.

(c) Write down the time of the latest train Janet can catch from Peterborough.

.....

(1)

(Total for Question 10 is 3 marks)

11 The diagram shows a solid cuboid.

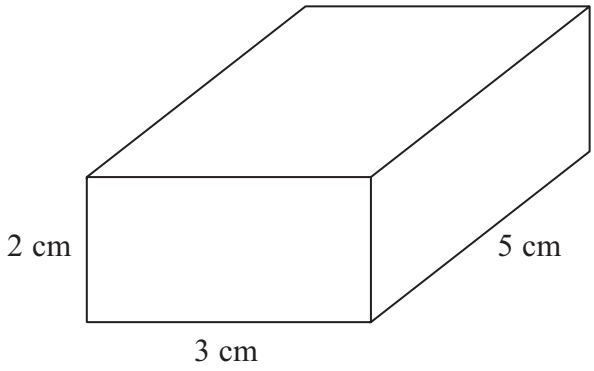


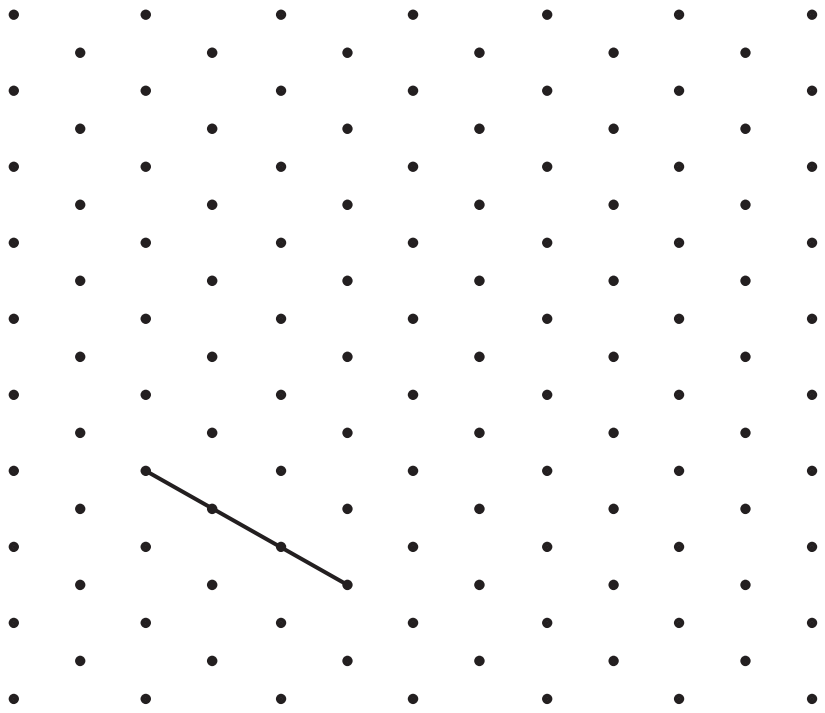
Diagram **NOT** accurately drawn

(a) Write down the number of faces the cuboid has.

.....

(1)

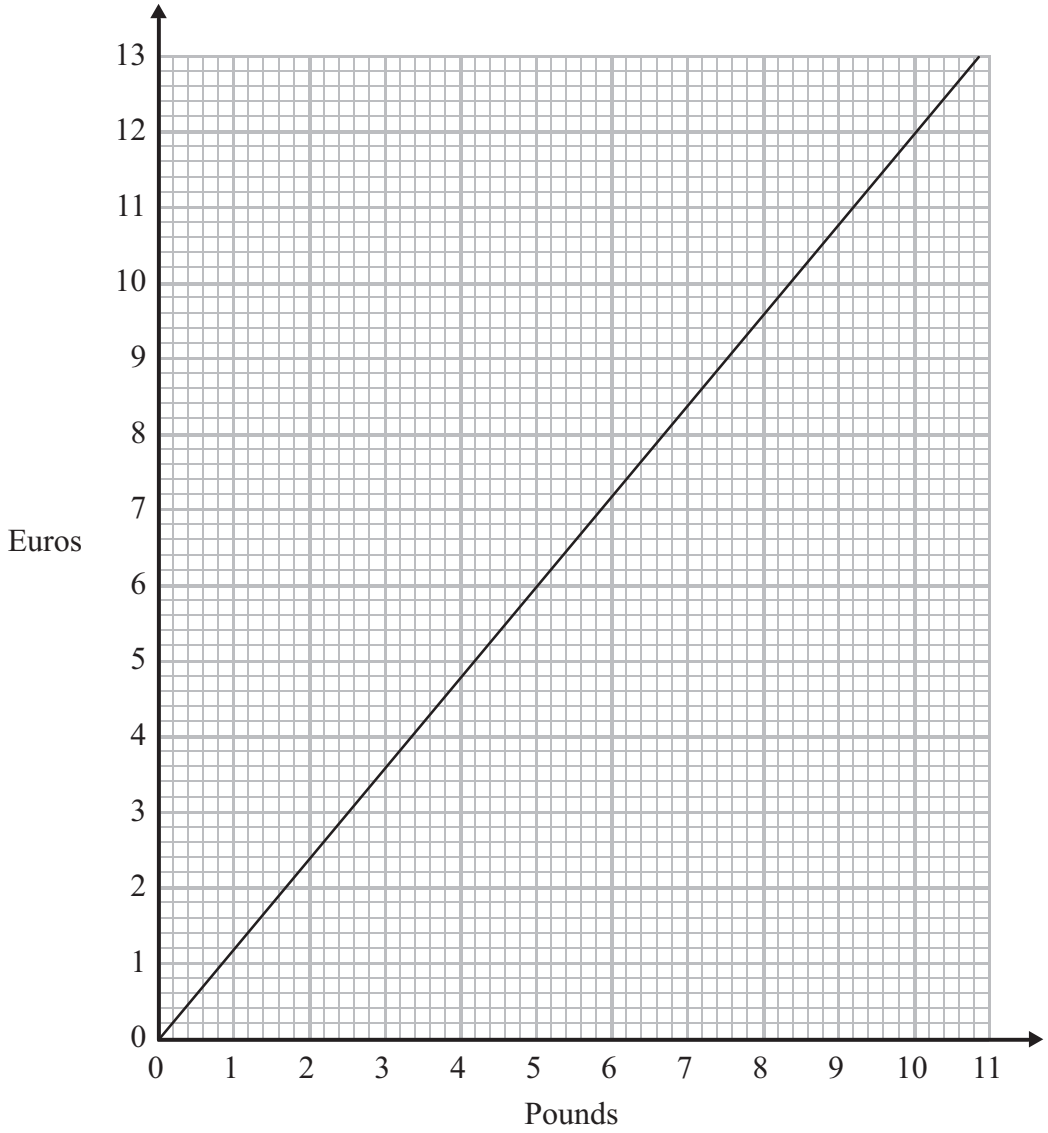
(b) On the centimetre isometric grid, make an accurate drawing of this cuboid.
One edge has been drawn for you.



(2)

(Total for Question 11 is 3 marks)

12 You can use this graph to change between pounds and euros.



(a) Change 6 euros into pounds.

..... pounds

(1)

Amy changes 50 pounds into euros.

(b) How many euros should she get?

..... euros

(2)

(Total for Question 12 is 3 marks)

13 There are 200 counters in a bag.
The counters are blue or red or yellow.

35% of the counters are blue.

$\frac{1}{5}$ of the counters are red.

Work out the number of yellow counters in the bag.

.....

(Total for Question 13 is 4 marks)

***14**

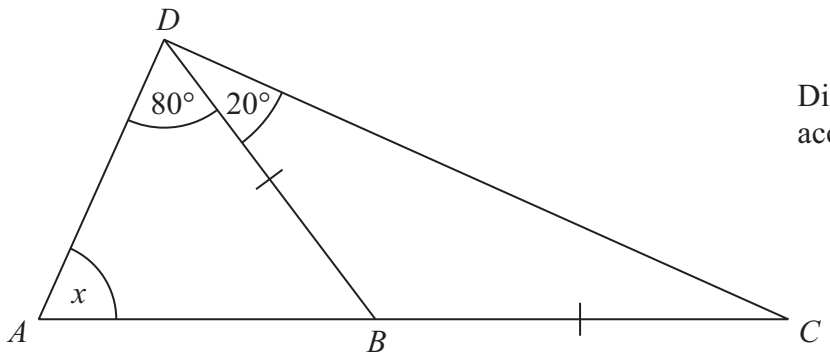


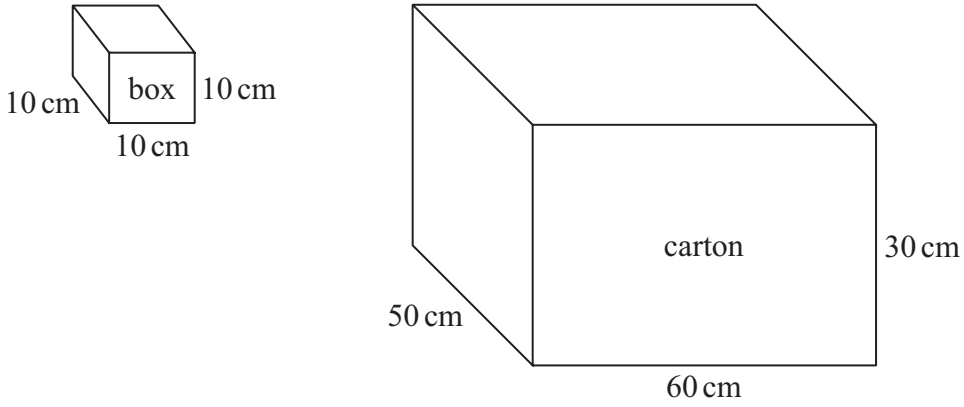
Diagram **NOT** accurately drawn

ABC is a straight line.
BD = *BC*
Angle *ADB* = 80°
Angle *BDC* = 20°

Work out the size of the angle marked *x*.
Give reasons for your answer.

(Total for Question 14 is 4 marks)

15



Diagrams **NOT** accurately drawn

Terry fills a carton with boxes.
Each box is a cube of side 10 cm.

The carton is a cuboid with

length	60 cm
width	50 cm
height	30 cm

Work out the number of boxes Terry needs to fill one carton completely.

.....

(Total for Question 15 is 3 marks)

16 (a) Expand $5(m + 2)$

.....

(1)

(b) Factorise $y^2 + 3y$

.....

(1)

(c) Simplify $a^5 \times a^4$

.....

(1)

(Total for Question 16 is 3 marks)

17 Here are the ingredients needed to make 16 chocolate biscuits.

Chocolate biscuits

Makes **16** chocolate biscuits

100 g of butter
50 g of caster sugar
120 g of flour
15 g of cocoa

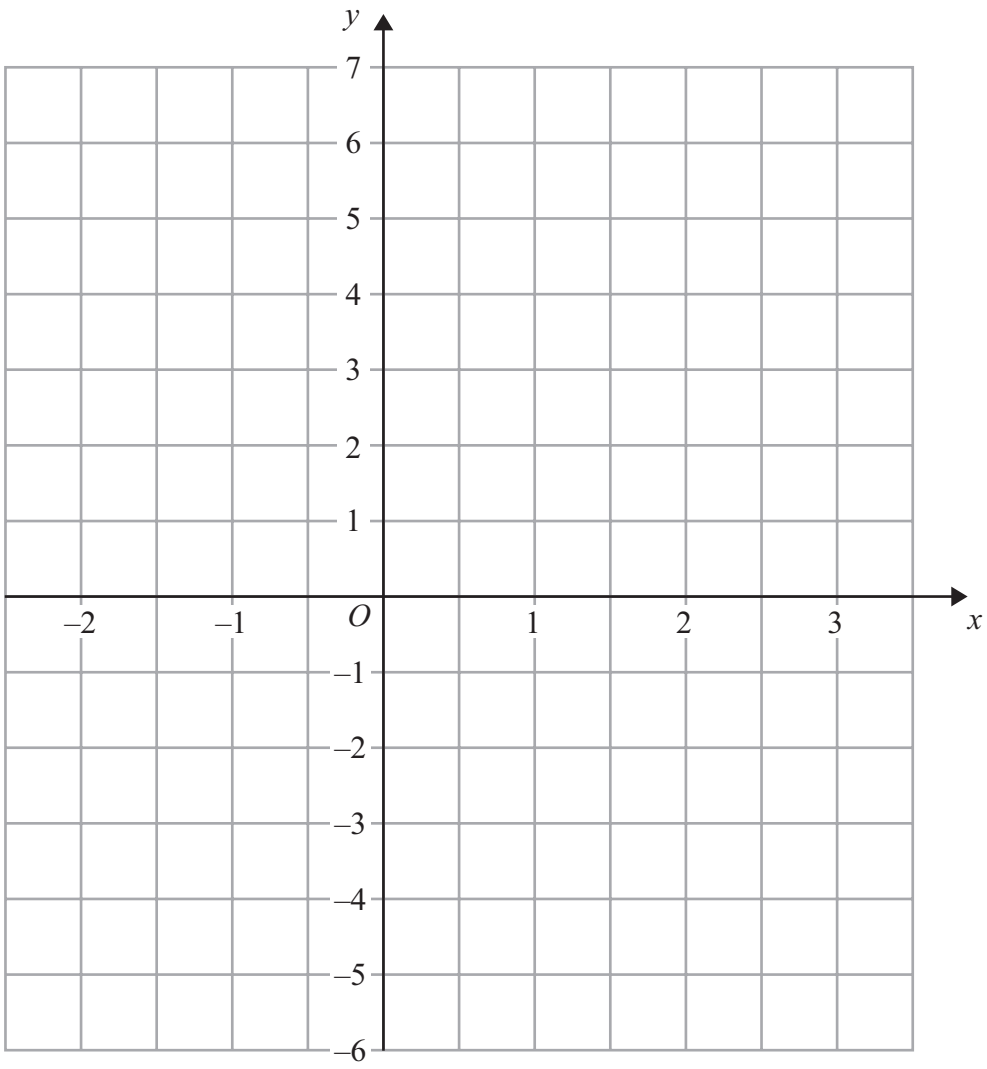
Sabrina has 250 g of butter
300 g of caster sugar
600 g of flour
and 60 g of cocoa

Work out the greatest number of chocolate biscuits Sabrina can make.
You must show your working.

.....

(Total for Question 17 is 3 marks)

18 On the grid, draw the graph of $y = 2x - 1$ for values of x from –2 to 3



(Total for Question 18 is 3 marks)

***19** The diagram shows the floor plan of Jill's dining room.

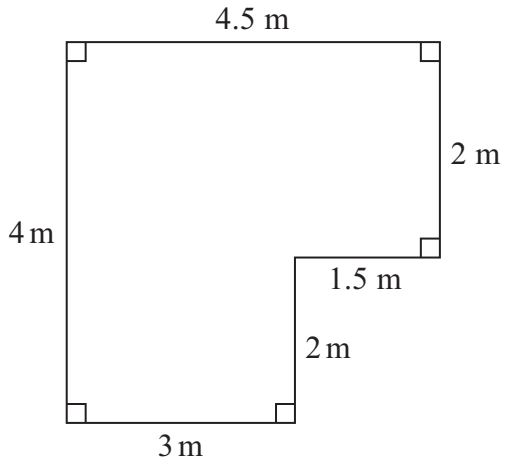


Diagram **NOT** accurately drawn

Jill is going to cover the floor with wooden floorboards.

The floorboards are sold in packs.
One pack of floorboards will cover 2.25 m^2.

Work out how many packs Jill needs.
You must show all your working.

(Total for Question 19 is 4 marks)

TOTAL FOR PAPER IS 60 MARKS

BLANK PAGE

BLANK PAGE

BLANK PAGE