Centre No.						Paper Reference								Surname	Initial(s)
Candidate No.						5	3	8	4	F	/	1	1	F	Signature

Paper Reference(s)

5384F/11F

Examiner's use only

Team Leader's use only

Edexcel GCSE

Mathematics (Modular) – 2381

Paper 11 (Non-Calculator)

Foundation Tier

Unit 3

Monday 18 May 2009 – Afternoon

Time: 1 hour

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 to Candidates

In the boxes above, write your centre number, candidate number, your surname, initials and signature.
Check that you have the correct question paper.
Answer ALL the questions. Write your answers in the spaces provided in this question paper.
You must NOT write on the formulae page.
Anything you write on the formulae page will gain NO credit.
If you need more space to complete your answer to any question, use additional answer sheets.

Information for Candidates

The marks for individual questions and the parts of questions are shown in round brackets: e.g. **(2)**.
There are 20 questions in this question paper. The total mark for this paper is 60.
There are 16 pages in this question paper. Any blank pages are indicated.
Calculators must not be used.

Advice to Candidates

Show all stages in any calculations.
Work steadily through the paper. Do not spend too long on one question.
If you cannot answer a question, leave it and attempt the next one.
Return at the end to those you have left out.

Printer's Log. No.
N34808A
W850/R5382F/57570 6/6/6

N 3 4 8 0 8 A 0 1 1 6

Turn over

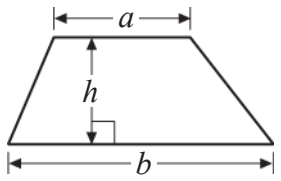
edexcel
advancing learning, changing lives

GCSE Mathematics

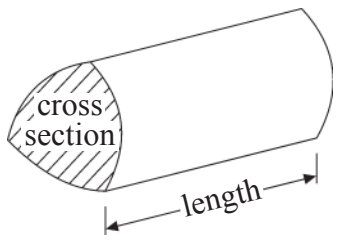
Formulae: Foundation Tier

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



Leave blank

Answer ALL TWENTY questions.

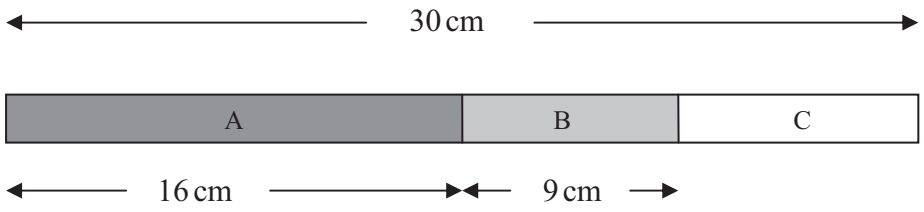
Write your answers in the spaces provided.

You must write down all stages in your working.

You must NOT use a calculator.

1.

Diagram **NOT** accurately drawn



Here is a picture of a stick.
The stick is in three parts, A, B and C.

The total length of the stick is 30 cm.
The length of part A is 16 cm.
The length of part B is 9 cm.

Work out the length of part C.

..... cm

(Total 2 marks)

Q1

Leave blank

2. (a) Work out 400 – 193

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

(b) Work out 4 – 9

..... **(1)**

(c) Work out -3×5

..... **(1)**

(d) Work out 300 ÷ 50

..... **(1)** **Q2**

(Total 5 marks)

3. (a) Work out 50% of £60

£ ..... **(1)**

(b) Work out 25% of 20 metres.

..... metres **(1)** **Q3**

(Total 2 marks)

Leave blank

4. Here is a table for a two-stage number machine.
The machine multiplies by 2 and then subtracts 3

Complete the table.

Input → **× 2** → **–3** → **Output**

Input	Output
2	1
4	5
10	.....
.....	27

Q4

(Total 3 marks)

5. Here are five shapes.

A **B** **C** **D** **E**

Write down the letter of a shape that has

(i) **no** lines of symmetry,

.....

(ii) exactly **one** line of symmetry,

.....

(iii) exactly **two** lines of symmetry,

.....

(iv) rotational symmetry of order two.

.....

Q5

(Total 4 marks)

Leave blank

6. The table shows temperatures at midnight and midday on one day in five cities.

City	Midnight temperature	Midday temperature
Belfast	−3 °C	4 °C
Cambridge	−1 °C	4 °C
Edinburgh	−7 °C	−1 °C
Leeds	−6 °C	3 °C
London	−2 °C	6 °C

(a) Which city had the lowest midnight temperature?

.....

(1)

(b) How many degrees higher was the midnight temperature in Cambridge than the midnight temperature in Leeds?

..... °C

(1)

(c) Which city had the greatest rise in temperature from midnight to midday?

.....

(1)

Q6

(Total 3 marks)

7. (a) Solve $x + 4 = 10$

$x =$ .....

(1)

(b) Solve $4y = 20$

$y =$ .....

(1)

(c) Solve $19 - m = 12$

$m =$ .....

(1)

Q7

(Total 3 marks)

Leave blank

8. The table shows part of a bus timetable from Shotton to Alton.

Shotton	07 30	08 00	09 00	10 00	11 00
Crook	07 45	08 15	09 15	10 15	11 15
Prudhoe	07 58	08 28	09 28	10 28	11 28
Hexham	08 15	08 45	09 45	10 45	11 45
Alton	08 30	09 00	10 00	11 00	12 00

A bus leaves Shotton at 07 30

(a) What time should it arrive at Alton?

.....

(1)

Another bus leaves Prudhoe at 08 28

(b) How many minutes should it take to get to Hexham?

..... minutes

(1)

Serena lives in Crook.
She has to be in Hexham by quarter past 11

(c) What is the time of the latest bus she can catch from Crook to arrive in Hexham by quarter past 11?

.....

(1)

Q8

(Total 3 marks)

Leave blank

9.

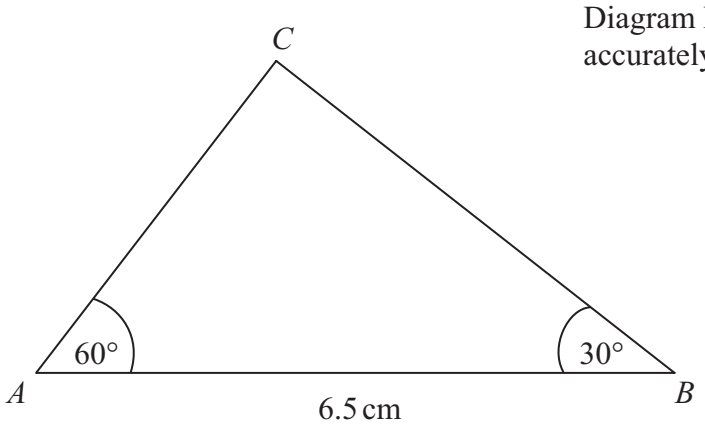


Diagram **NOT** accurately drawn

(a) Make an accurate drawing of triangle *ABC*.
The side *AB* has already been drawn for you.

A *B*

(2)

(b) Measure the size of the angle at *C* in your triangle.

..... °

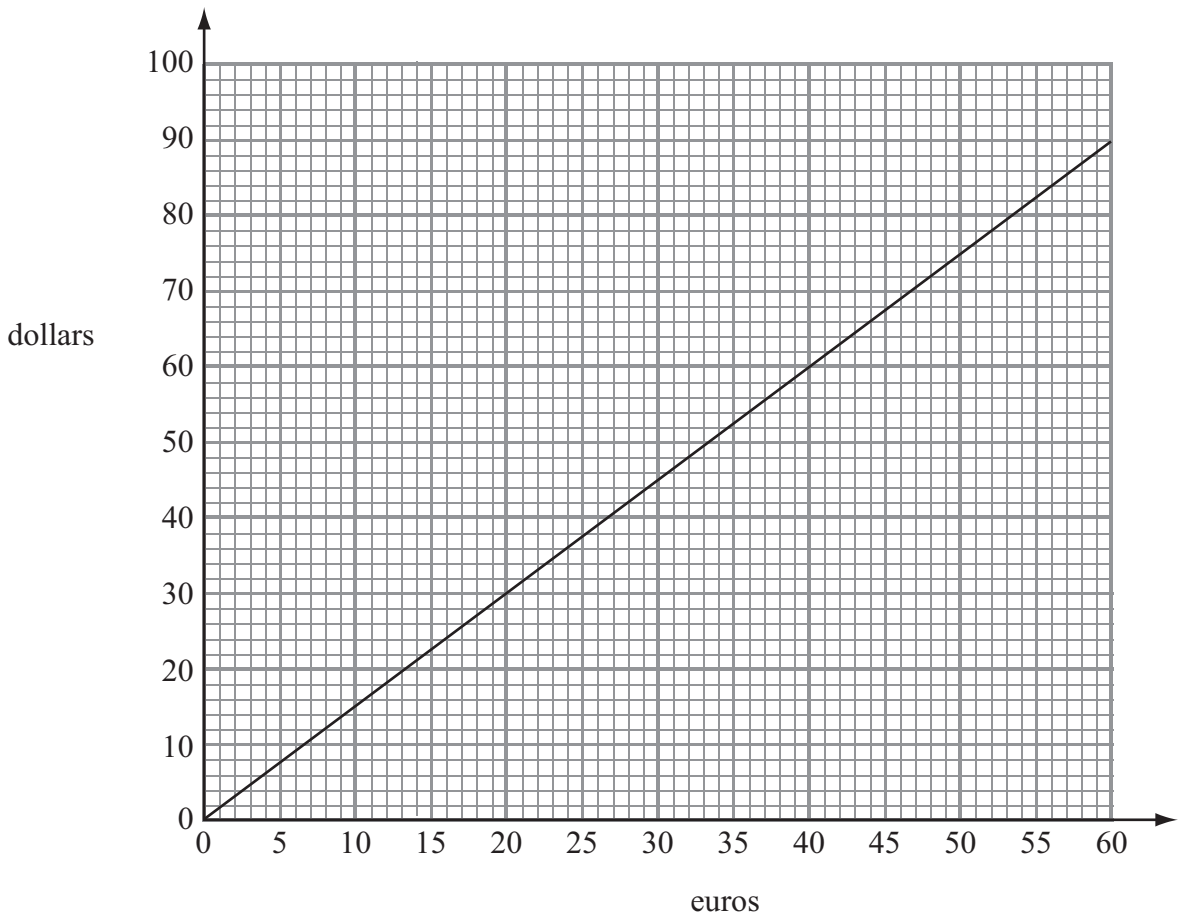
(1)

Q9

(Total 3 marks)

Leave blank

10.



The conversion graph can be used to change between euros and dollars.

(a) Use this graph to change 30 euros into dollars.

..... dollars
(1)

(b) Use this graph to change 90 dollars into euros.

..... euros
(1)

Bill changes 100 euros to dollars.

(c) Change 100 euros to dollars.

..... dollars
(2)

(Total 4 marks)

Q10

11. Work out $\frac{1}{8}+\frac{3}{4}$

Leave blank

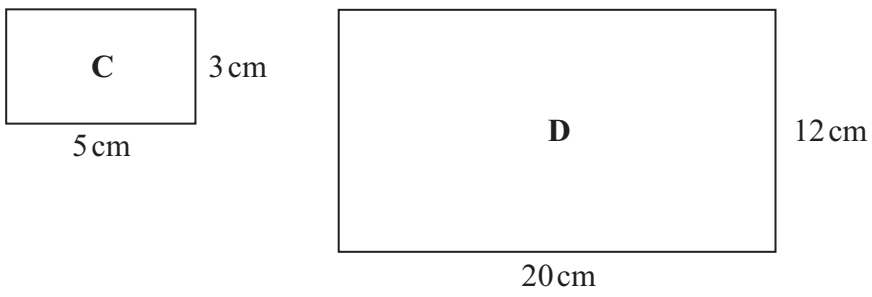
.....

Q11

(Total 2 marks)

12.

Diagram **NOT** accurately drawn



Rectangle **D** is an enlargement of rectangle **C**.

Find the scale factor of the enlargement.

.....

Q12

(Total 2 marks)

Leave blank

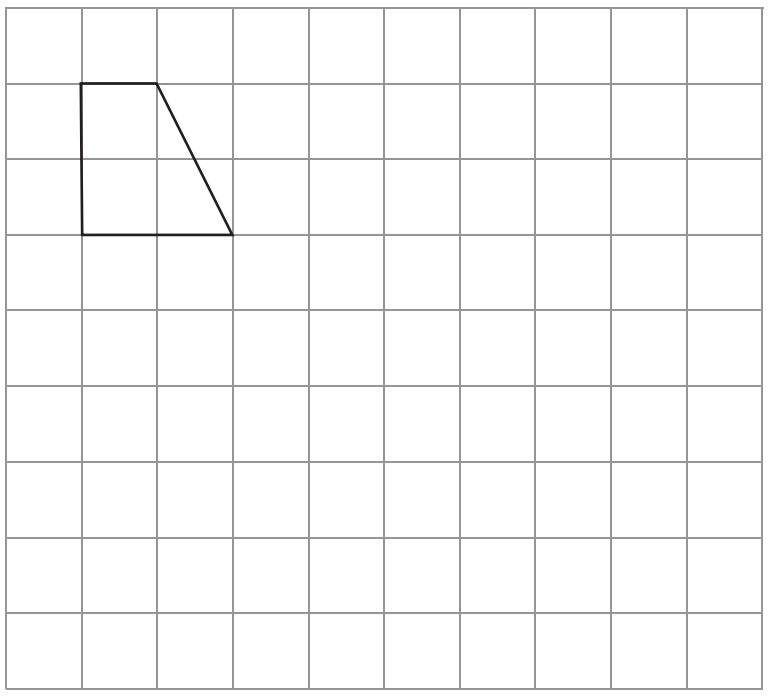
13. Work out 36×24

.....

(Total 3 marks)

Q13

14. On the grid, show how this trapezium tessellates.
You should draw at least 6 trapeziums.



(Total 2 marks)

Q14

Leave blank

15. Mary scored 14 out of 20 in a test.

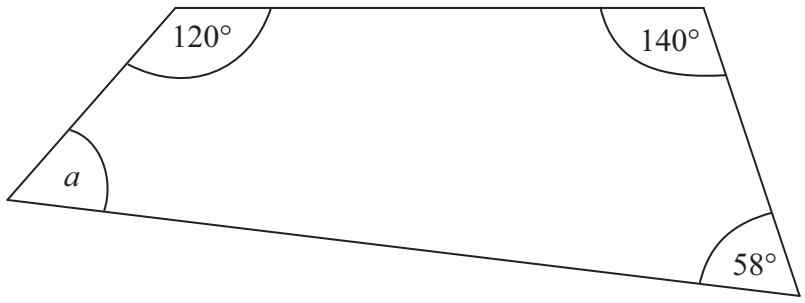
Find 14 out of 20 as a percentage.

..... %

(Total 2 marks)

Q15

16. Diagram **NOT** accurately drawn



Work out the size of the angle *a*.

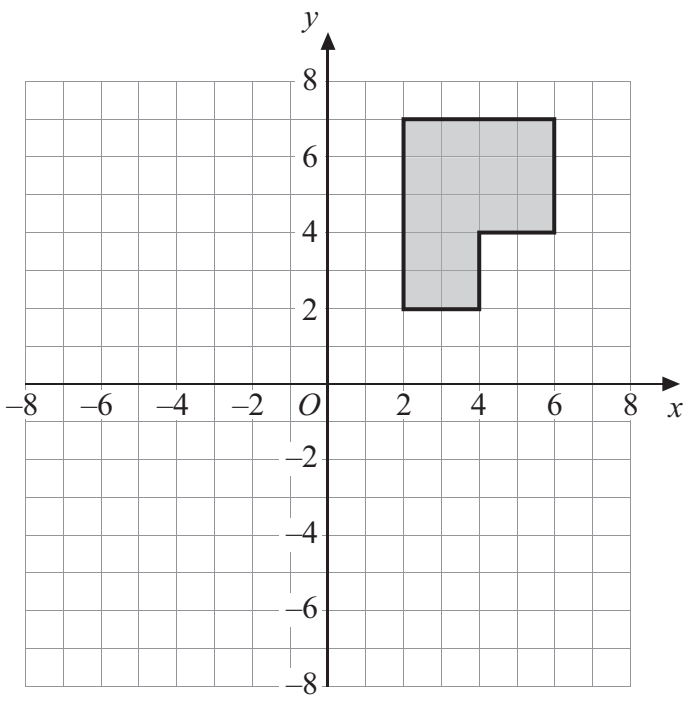
.....°

(Total 2 marks)

Q16

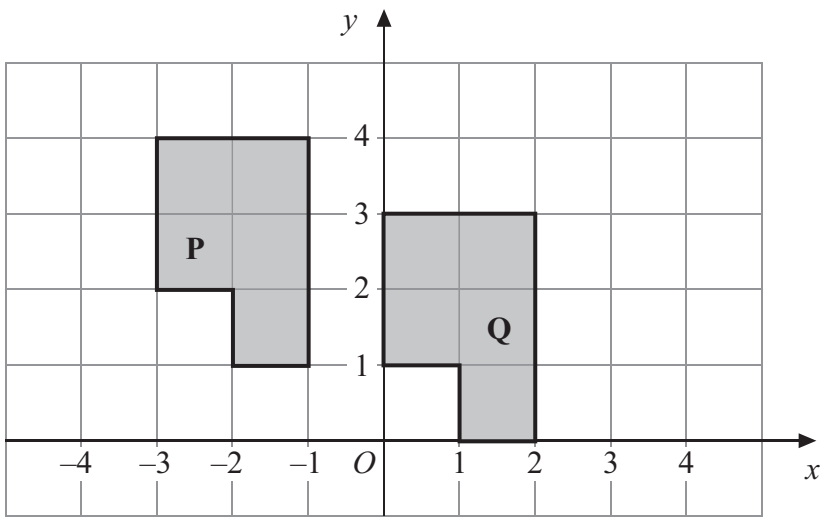
Leave blank

17.



(a) Rotate the shaded shape 90° clockwise about the point O.

(2)



(b) Describe fully the single transformation that will map shape **P** onto shape **Q**.

.....

(2)

Q17

(Total 4 marks)

Leave blank

18. Here is a list of ingredients for making **8** cheese scones.

Ingredients for 8 cheese scones
200 g self-raising flour
60 g butter
30 g cheese
150 m*l* milk

Work out the amount of each ingredient needed to make **12** cheese scones.

..... g self-raising flour

..... g butter

..... g cheese

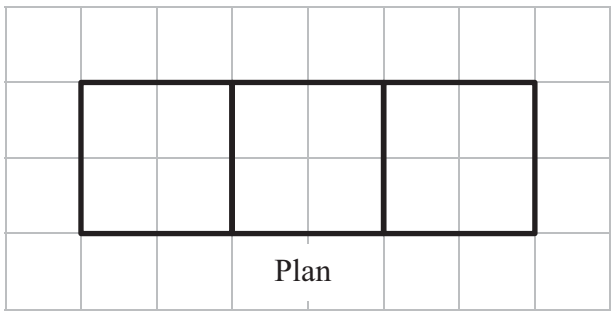
..... m*l* milk

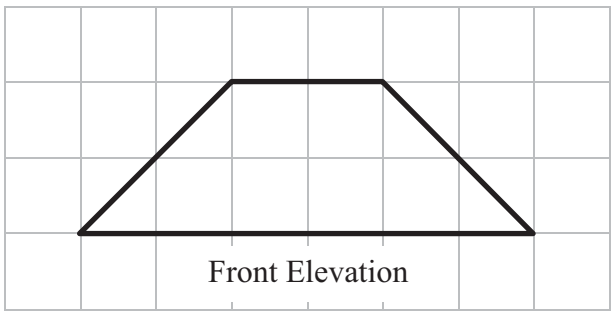
Q18

(Total 3 marks)

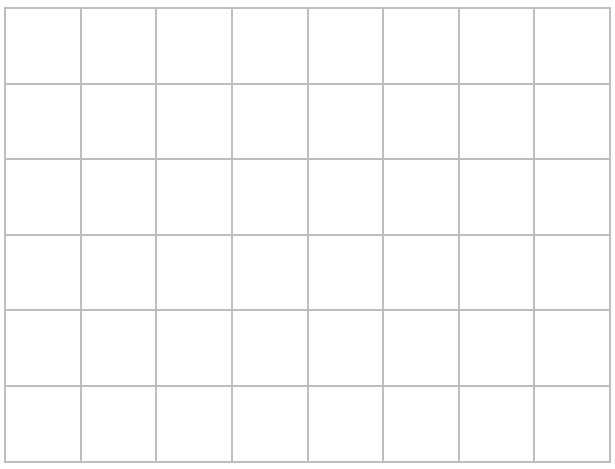
Leave blank

19. Here are the plan and front elevation of a solid shape.





(a) On the grid below, draw the side elevation of the solid shape.



(2)

(b) In the space below, draw a sketch of the solid shape.

(2) **Q19**

(Total 4 marks)

Leave blank

20.

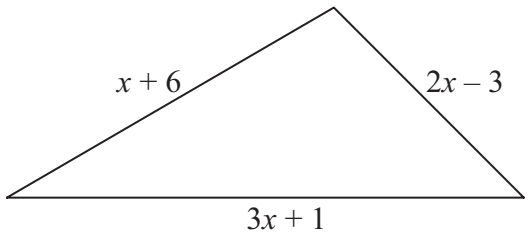


Diagram **NOT** accurately drawn

In the diagram, all measurements are in centimetres.

The lengths of the sides of the triangle are

$x + 6$
$2x - 3$
$3x + 1$

(a) Find an expression, in terms of x, for the perimeter of the triangle.

Give your expression in its simplest form.

.....

(2)

The perimeter of the triangle is 37 cm.

(b) Find the value of x.

$x =$ .....

(2)

Q20

(Total 4 marks)

TOTAL FOR PAPER: 60 MARKS

END