

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

Paper Reference(s)

5384F/11F

Edexcel GCSE

Mathematics (Modular) – 2381

Paper 11 (Non-Calculator)

Foundation Tier

Unit 3

Thursday 5 November 2009 – Morning

Time: 1 hour

Examiner's use only

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Team Leader's use only

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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 17 questions in this question paper. The total mark for this paper is 60.

There are 20 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.

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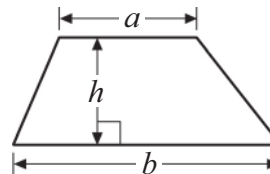
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GCSE Mathematics 2381

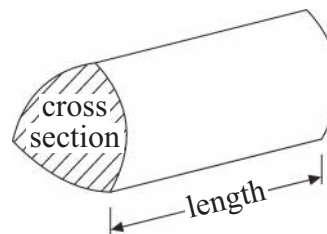
Formulae: Foundation Tier

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 \times length



Answer ALL SEVENTEEN 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) Work out $480 - 263$

.....
(2)

- (b) Work out 6×0.3

.....
(1)

- (c) Work out $5 - 1.4$

.....
(1)

(Total 4 marks)

Q1



2. The table shows the temperature in six cities at 11pm one day.

City	Temperature
Capetown	11 °C
Dublin	3 °C
London	−2 °C
Moscow	−6 °C
Paris	0 °C
Sydney	14 °C

(a) Write down the name of the city with

(i) the highest temperature,

.....

(ii) the lowest temperature.

.....

(2)

(b) Work out the difference between the temperature in Dublin and the temperature in London.

..... °C
(1)

(Total 3 marks)

Q2



3. 27 people were on a coach.

18 people got off the coach.

15 people got on the coach.



(a) How many people are there now on the coach?

.....
(2)

There were 24 people at the next coach stop.

$\frac{1}{3}$ of these people got on the coach.

(b) What is $\frac{1}{3}$ of 24?

.....
(2)

(Total 4 marks)

Q3

4. (a) Measure the length of the line AB .
Give your answer in centimetres.



..... cm
(1)

(b) Mark with a cross (\times) the point on the line AB that is 3 cm from A .

(1)

(Total 2 marks)

Q4



5. $r = 9, s = 4$

Find the value of

(i) $r - s$

.....

(ii) $10r$

.....

(Total 2 marks)

Q5



6. A shop sells ink cartridges.

Ink Cartridge	Cost
Black	£6 each
Colour	£8.50 each

Liz buys 6 colour ink cartridges.

(a) Work out her total cost.

£
(2)

Callum has £50 to spend on ink cartridges.

(b) Work out the greatest number of black ink cartridges he can buy.

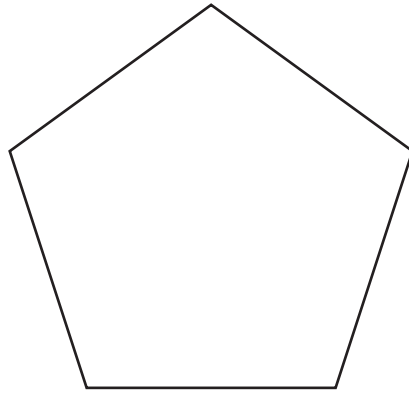
.....
(2)

(Total 4 marks)

Q6



7. Here is a regular pentagon.

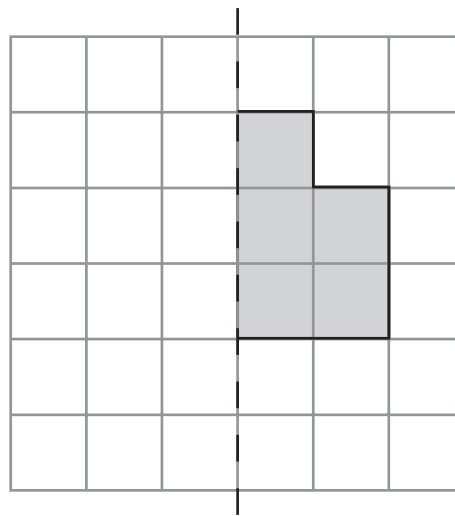


(a) What is the order of rotational symmetry of this pentagon?

.....
(1)

(b) Draw a line of symmetry on this pentagon.

(1)



Mirror
line

(c) Reflect the shaded shape in the mirror line.

(1)

Q7

(Total 3 marks)



8. A school shop sells four flavours of crisps.

Sandra kept a record of the sales of crisps in one week.
The table gives some information about the sales.

Flavour	Percentage sales
Plain	25%
Salt & Vinegar	40%
Cheese & Onion	20%
Beef	

- (a) Complete the table.

(1)

- (b) Which flavour of crisp had the highest percentage sales?

.....
(1)

- (c) Write 25% as a fraction in its simplest form.

.....
(2)

The school shop sold 200 packets of crisps that week.

- (d) How many packets of Cheese & Onion crisps were sold during that week?

.....
(2)

(Total 6 marks)

Q8



9. Here is a sketch of a right-angled triangle.

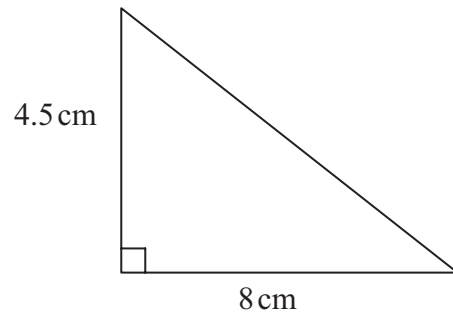


Diagram **NOT**
accurately drawn

In the space below, make an accurate drawing of this triangle.

Q9

(Total 3 marks)



10. Shams uses this rule to work out the total charge for photocopying.

$$\text{Total charge} = \text{number of photocopies} \times \text{copy rate}$$

Shams needs 15 photocopies in colour.
The copy rate for photocopies in colour is 6 pence.

(a) Use the rule to work out the total charge.

..... p
(2)

Shams also needs 25 photocopies in black and white.
The total charge is 75 pence.

(b) Use the rule to work out the copy rate for photocopies in black and white.

..... p
(2)

(Total 4 marks)

Q10



11.

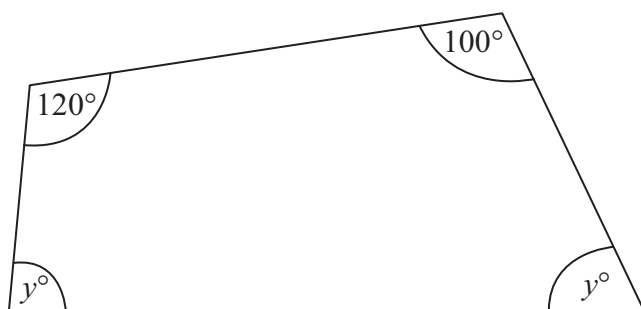


Diagram **NOT**
accurately drawn

Work out the value of y .

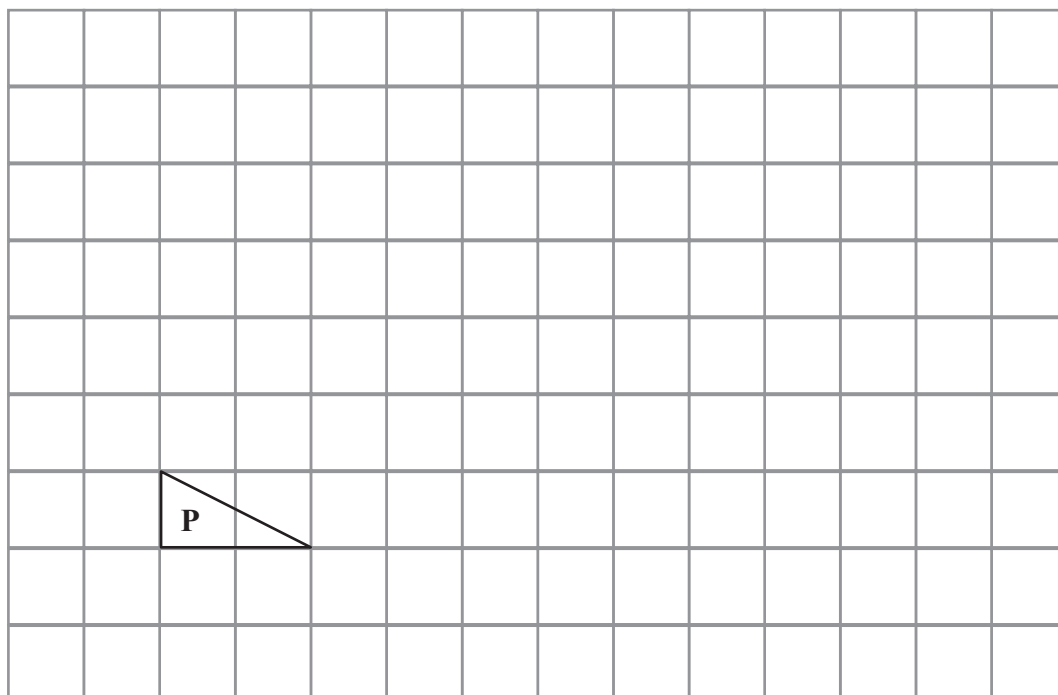
$y = \dots\dots\dots$

(Total 3 marks)

Q11



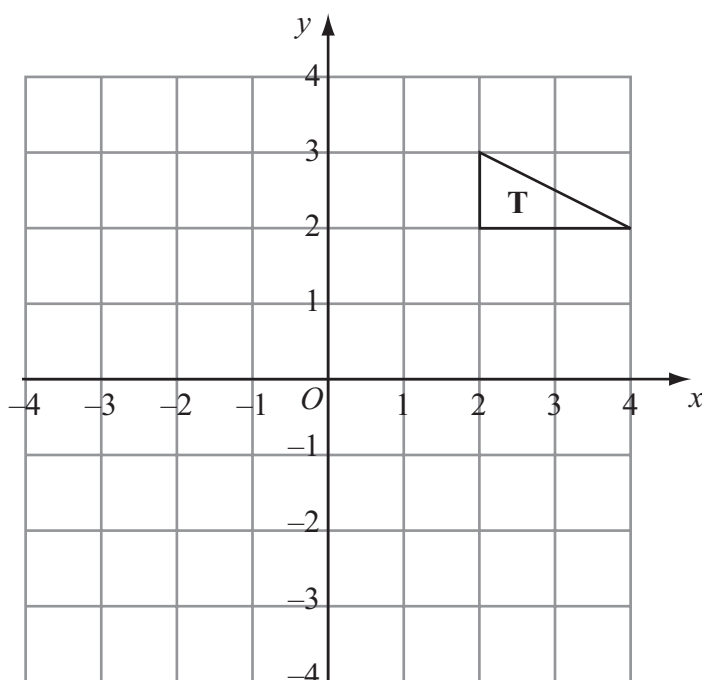
12.



Triangle **P** has been drawn on a grid.

- (a) On the grid, draw an enlargement of the triangle **P** with scale factor 3

(2)



Triangle **T** has been drawn on a grid.

- (b) On the grid, reflect triangle **T** in the y -axis.

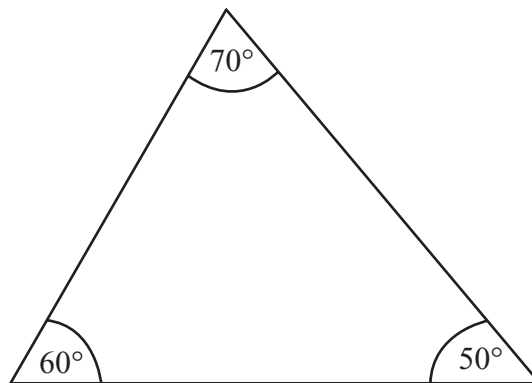
(2)

Q12

(Total 4 marks)



13. (a) Here is a triangle.



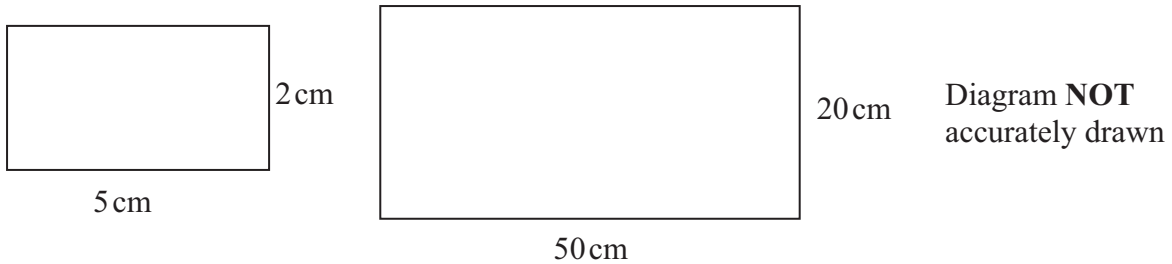
This triangle is to be enlarged by a scale factor of 2

Emily says the angles will be doubled.

Emily is **wrong**.
Explain why.

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

(b) Here are two rectangles.



Ross says that the larger rectangle is an enlargement of the smaller rectangle.

Ross is **correct**.
Explain why.

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

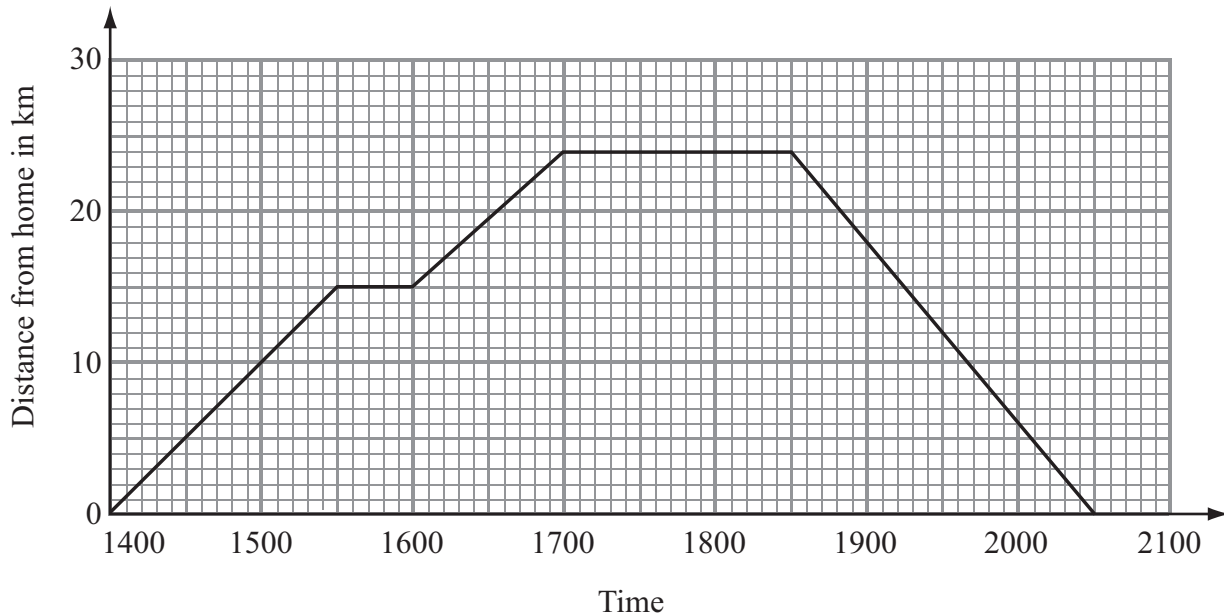
(Total 3 marks)

Q13



14. Jenny cycled from home to visit her uncle.
She also cycled back home.

The travel graph shows her journey.



She had a rest on the way to her uncle's house.

- (a) How far did Jenny cycle before she had a rest?

..... km
(1)

- (b) At what time did Jenny arrive at her uncle's house?

.....
(1)

- (c) For how many hours was Jenny away from home?

..... hours
(2)

- (d) Work out Jenny's average speed for her journey from her uncle's house back to her home.

Give your answer in kilometres per hour.

..... kilometres per hour
(2)

(Total 6 marks)

Q14



15. Here is a list of the ingredients needed to make 12 muffins.

Ingredients for 12 muffins

210 g self-raising flour
150 g sugar
250 ml milk
60 g butter
 $\frac{1}{4}$ teaspoon vanilla essence

(a) Work out how much butter is needed to make 36 muffins.

..... g
(2)

(b) Work out how much milk is needed to make 6 muffins.

..... ml
(2)

(Total 4 marks)

Q15



16. k is an integer such that $-1 \leq k < 3$

List all the possible values of k .

Q16

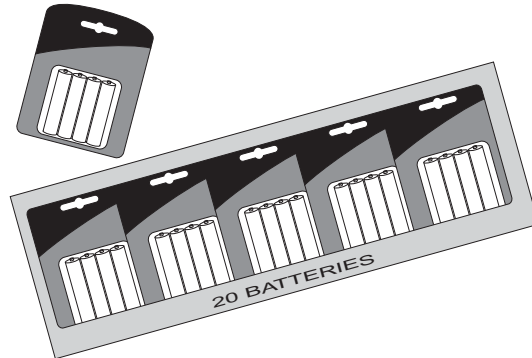
(Total 2 marks)

17. Batteries are sold in packets and boxes.

Each packet contains 4 batteries.
Each box contains 20 batteries.

Bill buys p packets of batteries
and b boxes of batteries.
Bill buys a total of N batteries.

Write down a formula for N in
terms of p and b .



Q17

(Total 3 marks)

TOTAL FOR PAPER: 60 MARKS

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