

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

Monday 6 June 2011 – Afternoon

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 18 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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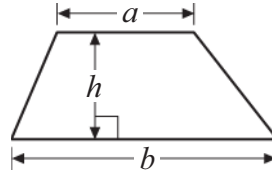
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GCSE Mathematics

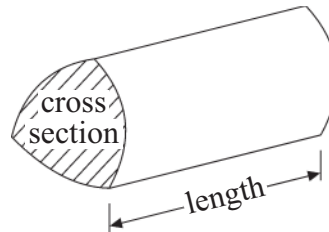
Formulae: Foundation Tier

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 EIGHTEEN 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 4×0.6

.....
(1)

(b) Work out 2.58×10

.....
(1)

(c) Work out $2.1 \div 3$

.....
(1)

(d) Work out $380 \div 1000$

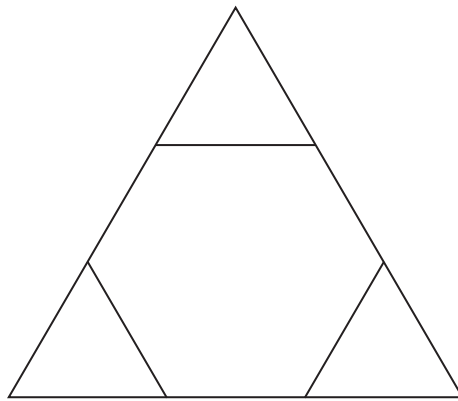
.....
(1)

(Total 4 marks)

Q1



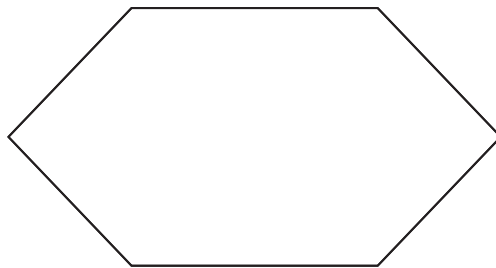
2. Here is a shape.



(a) Write down the order of rotational symmetry of this shape.

.....
(1)

Here is a hexagon.



(b) On the shape, draw all the lines of symmetry.

(2)

Q2

(Total 3 marks)



3. Simone and Barry use this rule to work out their pay.

$$\text{Pay} = \text{£}6.20 \times \text{number of hours worked}$$

Simone works for 4 hours.

(a) Work out her pay.

£
(2)

Barry’s pay is £15.50

(b) How many hours did he work?

..... hours
(2)

(Total 4 marks)

Q3



4. There are 1485 people in a school.
737 of these people are male.

(a) Work out the number of females in the school.

.....
(2)

246 pupils and 13 teachers are going on a school trip.
They are going to hire 5 coaches for the trip.
Each coach has 53 seats for passengers.

(b) Work out the total number of empty seats.

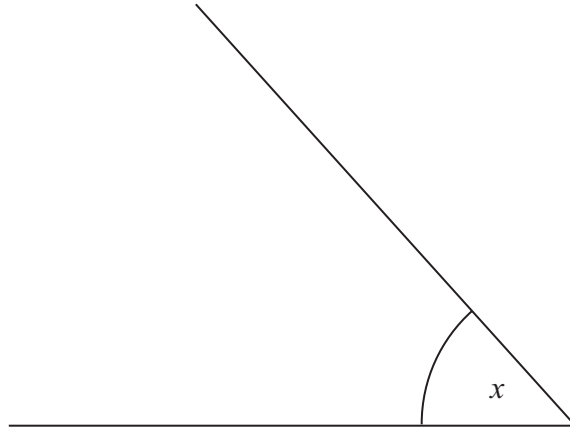
.....
(3)

(Total 5 marks)

Q4



5.



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

.....
(1)

(b) At A , draw accurately an angle of 150°



(1)

The length of each side of a triangle is 5 cm.

(c) Write down the size of each angle of this triangle.

.....
(1)

(Total 3 marks)

Q5



6. The table shows the temperature at different times on one day in London.

Time of day	Temperature
2 am	-1°C
6 am	-3°C
10 am	5°C
2 pm	7°C
6 pm	4°C
10 pm	3°C

(a) At which of these times was the temperature lowest?

.....
(1)

(b) Work out the difference between the highest temperature and the lowest temperature.

..... $^{\circ}\text{C}$
(1)

(c) Between two of these times the temperature fell by 3°C .
Which two times?

..... and
(1)

(Total 3 marks)

Q6



7. Emily went on a journey in her car.

At the start of her journey, the distance reading was 12 478 miles.

At the end of her journey, the distance reading was 12 642 miles.

Emily was paid 40p for each mile of her journey.

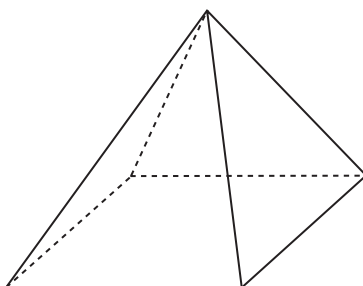
Work out the total amount Emily was paid.

£

(Total 4 marks)

Q7

8. Here is a diagram of a solid 3-D shape.



Write down the mathematical name of the 3-D shape.

.....

(Total 1 mark)

Q8



9.

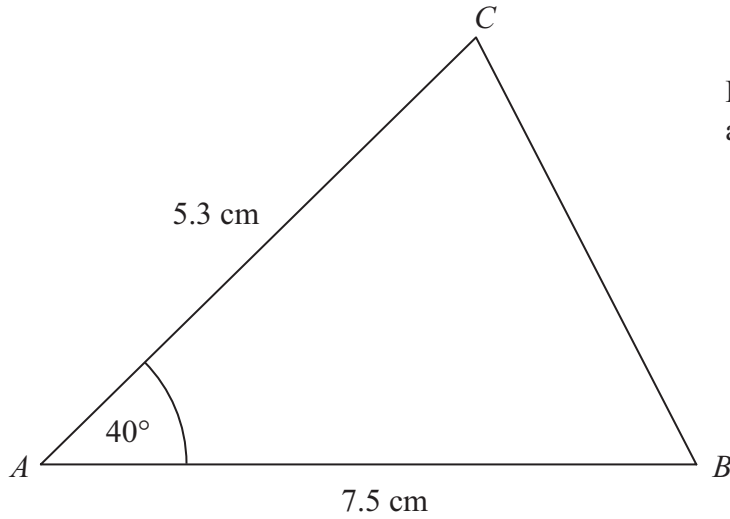


Diagram **NOT**
accurately drawn

Make an accurate drawing of this triangle.

The line AB has already been drawn for you.

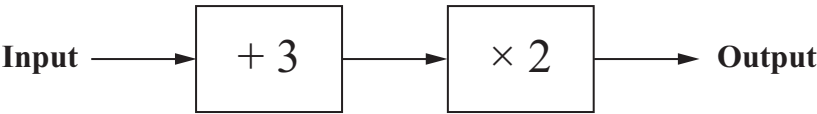
A ————— B

(Total 2 marks)

Q9



10. Here is a two-stage number machine.



The machine adds 3 and then multiplies by 2

Complete the table.

Input	Output
2	10
5	16
7
.....	36

Q10

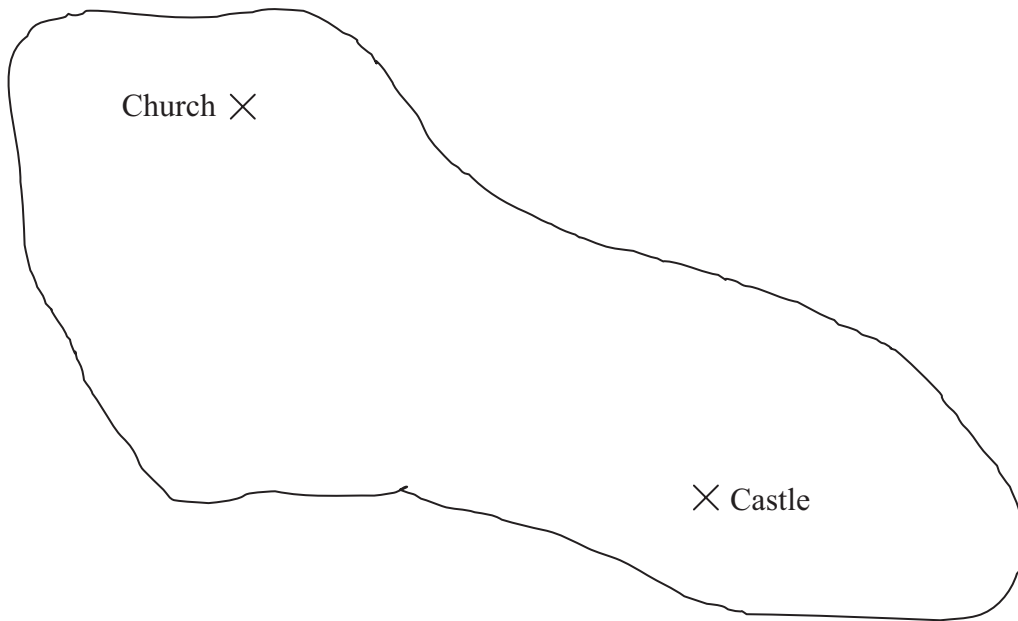
(Total 2 marks)



11. (a) Simplify the ratio 8 : 22

.....
(1)

The diagram shows part of a map.
It shows the positions of a castle and a church.



The scale of the map is 1:10 000

(b) Work out the real distance between the castle and the church.
Give your answer in metres.

..... m
(2)

(Total 3 marks)

Q11



12. Some students went to the cinema.
Each student watched film A or film B or film C.

$\frac{3}{8}$ of the students watched film A.

40% of the students watched film B.

What fraction of the students watched film C?

.....

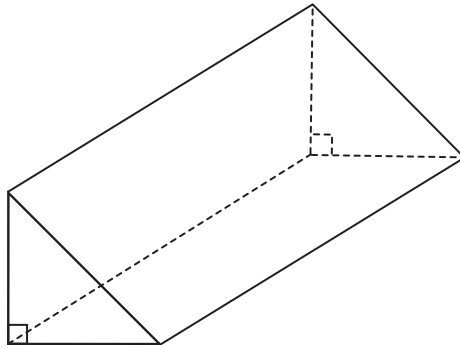
(Total 3 marks)

Q12



13.

Diagram **NOT**
accurately drawn



The diagram shows a triangular prism.
The cross-section of the prism is a right angled isosceles triangle.

(a) In the space below, draw a sketch of a net for the triangular prism.

(2)



- (b) In the space below, use a ruler and compasses to **construct** the perpendicular bisector of the line AB .

You must show all construction lines.

A ————— B

(2) Q13

(Total 4 marks)



14. $H = 2a + 3b$
 $a = 5$
 $b = -1$

(a) Work out the value of H .

.....
(2)

$P = 3h^2$
 $h = -4$

(b) Work out the value of P .

.....
(2)

(c) Make x the subject of the formula $y = \frac{x+2}{3}$

.....
(2)

(Total 6 marks)

Q14



15. (a) Work out the value of 2^4

.....
(1)

(b) Simplify $t \times t \times t$

.....
(1)

(c) Simplify fully $\frac{n^9}{n^3 \times n^2}$

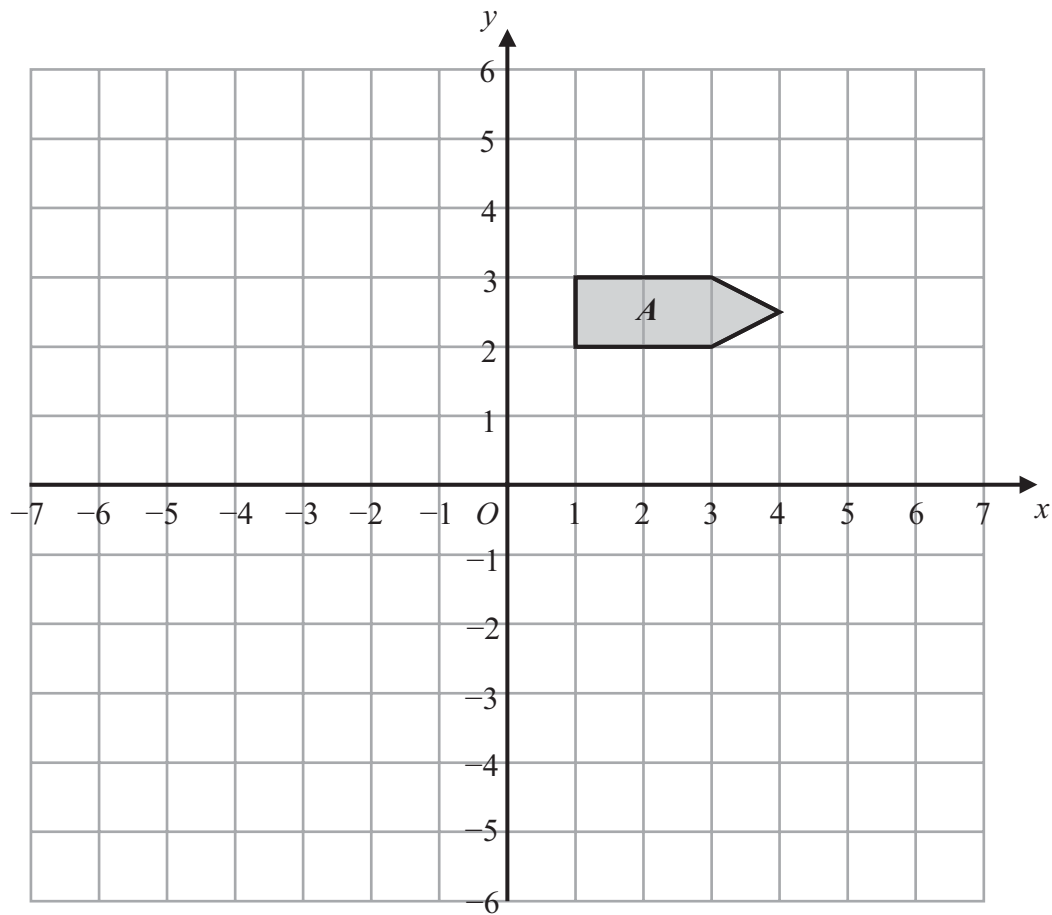
.....
(2)

(Total 4 marks)

Q15

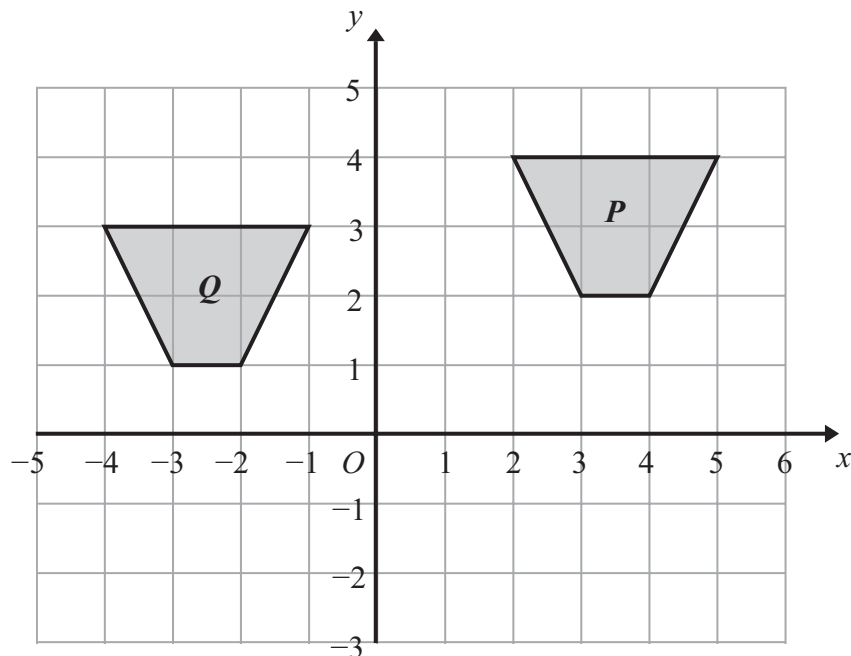


16.



- (a) On the grid above, reflect shape *A* in the line $x = -1$

(2)



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

.....

.....

Q16

(2)

(Total 4 marks)



17. Peter, Tarish and Ben share £54

Tarish gets three times as much money as Peter.
Ben gets twice as much money as Tarish.

How much money does Ben get?

£

(Total 3 marks)

Q17

18. Callum says

“4 m² is equivalent to 400 cm².”

Is Callum correct?
Give reasons for your answer.

.....

.....

.....

(Total 2 marks)

Q18

TOTAL FOR PAPER: 60 MARKS

END



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