Centre No.						Paper Reference								Surname	Initial(s)
Candidate No.						5	3	8	4	F	/	1	2	F	Signature

Paper Reference(s)

5384F/12F

Examiner's use only

Team Leader's use only

Edexcel GCSE

Mathematics (Modular) – 2381

Paper 12 (Calculator)

Foundation Tier

Unit 3

Monday 14 November 2011 – Morning

Time: 1 hour

Materials required for examination
Ruler graduated in centimetres and millimetres, protractor, compasses, pen, HB pencil, eraser, calculator. 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 16 pages in this question paper. Any blank pages are indicated.
Calculators may be used.
If your calculator does not have a π button, take the value of π to be 3.142 unless the question instructs otherwise.

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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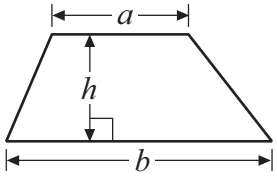
GCSE Mathematics 2381

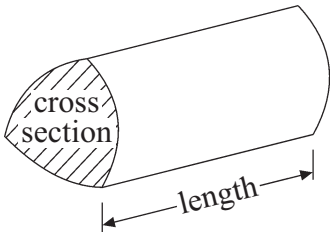
Formulae: Foundation Tier

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 × length



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Answer ALL SEVENTEEN questions.

Write your answers in the spaces provided.

You must write down all stages in your working.

1. A television programme started at 17 55
The programme was 1 hour 20 minutes long.

(i) At what time did the programme end?

.....

Mumtaz started to watch this programme at 18 34

(ii) How many minutes of the programme did Mumtaz miss?

..... minutes

(Total 3 marks)

Q1

2. (a) Find $\frac{3}{4}$ of £72

£ .....

(1)

(b) Write down two numbers that multiply together to give 0.08
Do **not** use the number 1

..... × ..... = 0.08

(1)

(Total 2 marks)

Q2

Leave blank

3. In the space below, draw accurately a circle with radius 4.5 cm.
Use the point marked with a cross (×) as the centre of your circle.

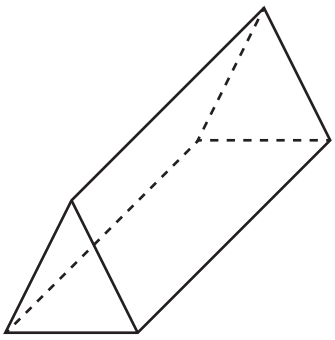
×

Q3

(Total 1 mark)

4. Write down the mathematical name of each of these two 3-D shapes.

(i)



(ii)

(i) .....

(ii) .....

Q4

(Total 2 marks)

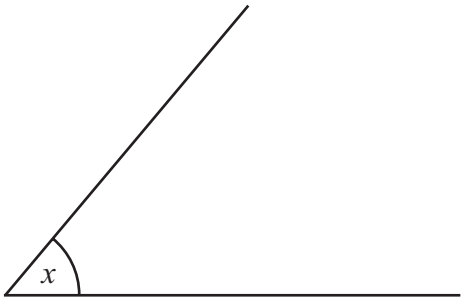
Leave blank

5.

(a) Measure the length of the line AB.

..... cm

(1)



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

..... °

(1)

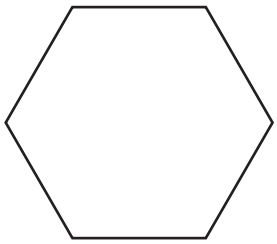
(c) In the space below, draw an angle of 130° at P.

(1) **Q5**

(Total 3 marks)

Leave blank

6. Here is a regular hexagon.



(a) Draw all the lines of symmetry on this hexagon.

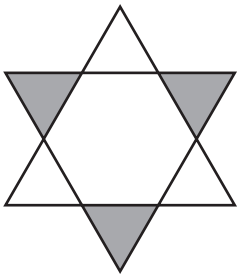
(2)

(b) Write down the order of rotational symmetry of this hexagon.

.....

(1)

Here is another shape.



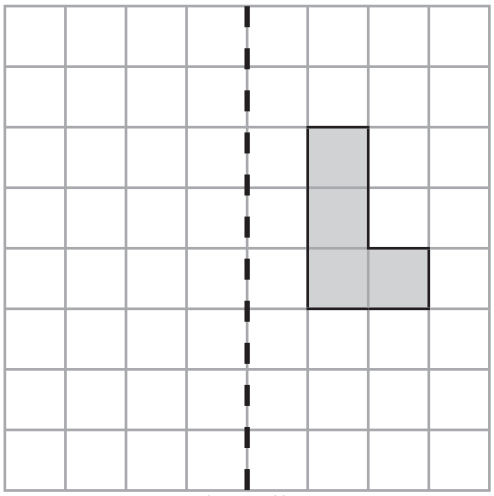
(c) Write down the order of rotational symmetry of this shape.

.....

(1)

Leave blank

(d) Reflect this shape in the mirror line.



(1) **Q6**

(Total 5 marks)

7. Here is an equilateral triangle.

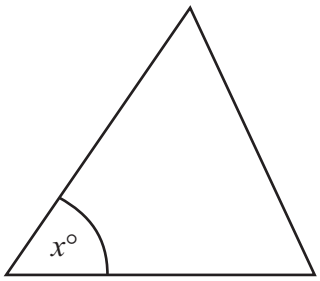


Diagram **NOT** accurately drawn

Write down the value of x.

x = ... **Q7**

(Total 1 mark)

Leave blank

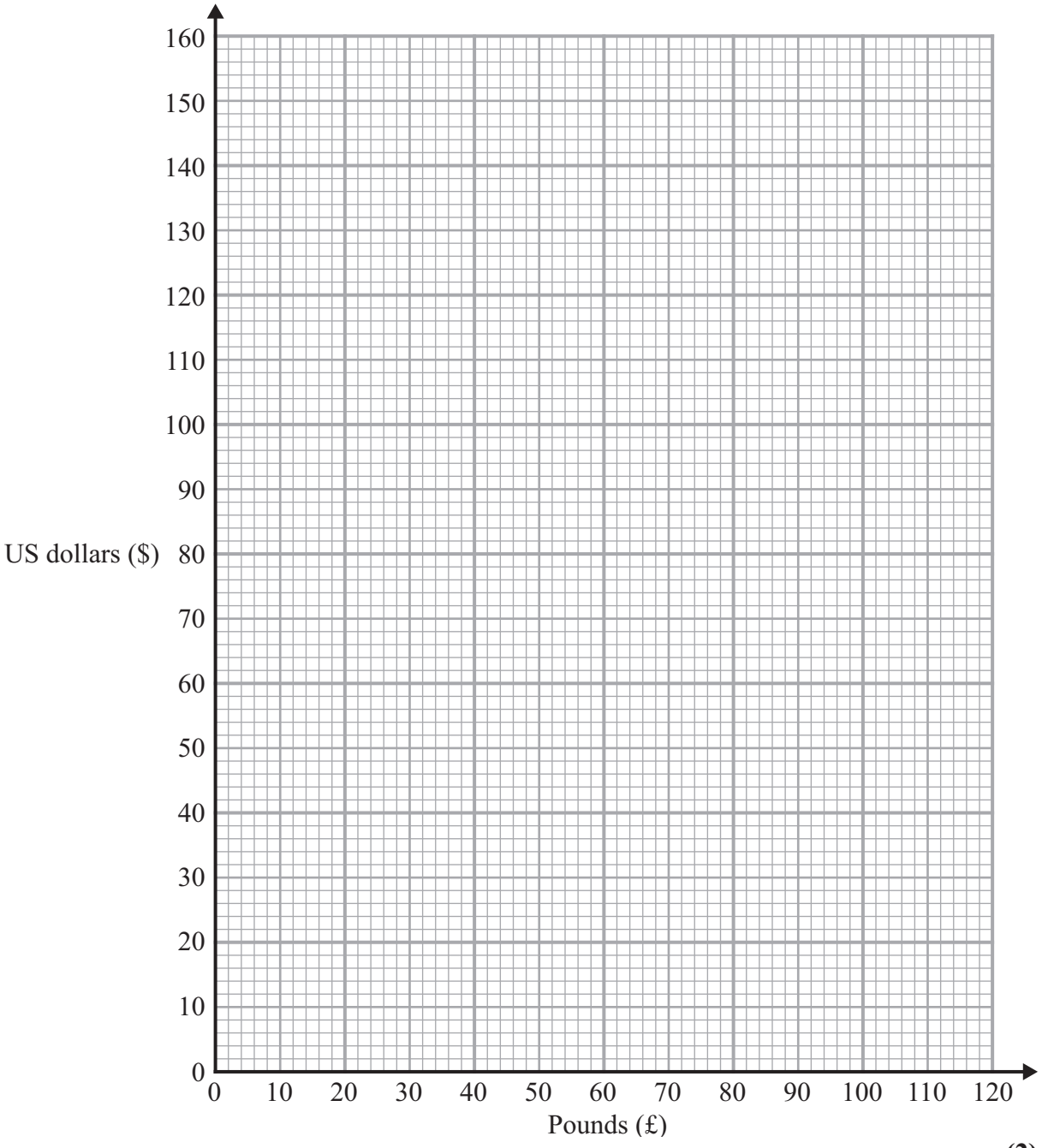
8. The exchange rate to change pounds (£) into US dollars ($) is £1 = $1.50

(a) Use this exchange rate to complete the table below.

Pounds (£)	0	1	2	5	10	20	50	100
US dollars ($)	0	1.50		7.50		30		150

(2)

(b) On the grid, draw a conversion graph for converting between pounds and US dollars.



(2)

(c) Change $100 into pounds (£).

£ .....

(2)

(Total 6 marks)

Q8

Leave blank

9. (a) Solve $4x = 20$

$x =$ .....

(1)

(b) Solve $\frac{y}{3} = 9$

$y =$ .....

(1) **Q9**

(Total 2 marks)

10. Sharon has x stamps.
Ahmed has three times as many stamps as Sharon.
Billie has six more stamps than Sharon.

(a) Show that the total number of all these stamps is $5x + 6$

(2)

The total number of all these stamps is 41

(b) Work out the number of stamps that Sharon has.

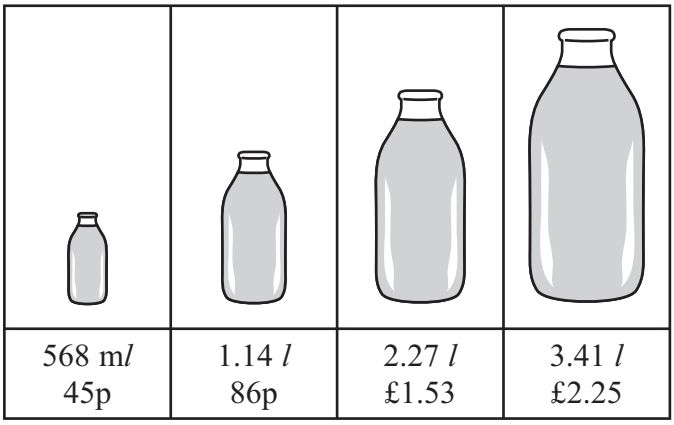
.....

(2) **Q10**

(Total 4 marks)

Leave blank

11. A supermarket sells milk in four sizes of bottle.



568 m*l*	1.14 *l*	2.27 *l*	3.41 *l*
45p	86p	£1.53	£2.25

Aysha buys one bottle of milk of each size.

(a) Work out the total amount of milk, in litres, that Aysha buys.

..... litres
(2)

Emily buys

one 2.27 *l* bottle of milk
and two 1.14 *l* bottles of milk.

She pays with a £10 note.

(b) How much change should Emily get?

£ .....
(3)

Leave blank

Simon needs 11 litres of milk.
He pays the least amount of money.

(c) (i) How many bottles of milk of each size does he buy?

.....

(ii) How much does he pay?

£ .....

(3) **Q11**

(Total 8 marks)

Leave blank

12. Ron bought 3 kg of potatoes and 2 kg of carrots.
The total cost was £5.08

Potatoes cost £1.24 per kg.
Work out the cost of 1 kg of carrots.

.....

Q12

(Total 3 marks)

13. Work out the value of $\frac{6^5 \times 6^2}{6^4}$

Give your answer as a power of 6

.....

Q13

(Total 2 marks)

Leave blank

14.

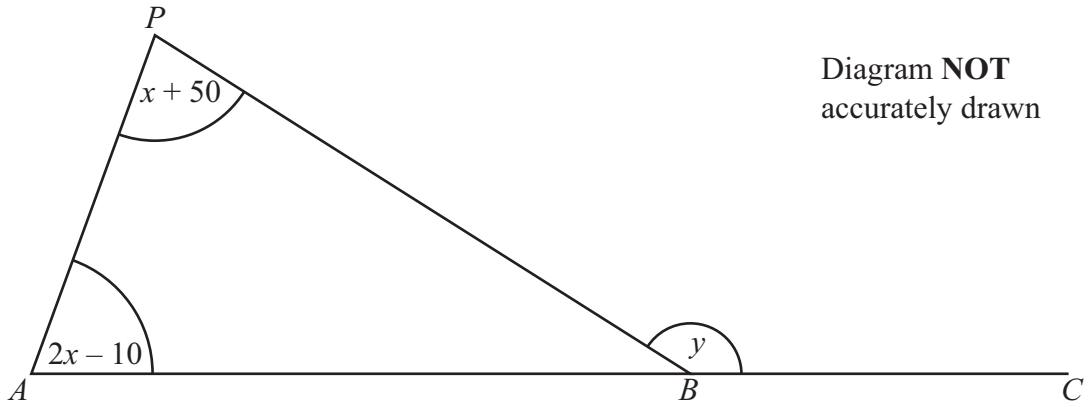


Diagram **NOT** accurately drawn

All angles are measured in degrees.

ABC is a straight line.
Angle *APB* = $x + 50$
Angle *PAB* = $2x - 10$
Angle *PBC* = y

(a) Show that $y = 3x + 40$
Give reasons for each stage of your working.

(3)

(b) Given that $y = 145$,

(i) work out the value of x,

$x =$ .....

(ii) work out the size of the largest angle in triangle *ABP*.

..... °

(4) **Q14**

(Total 7 marks)

Leave blank

15. Melissa is 13 years old.
Becky is 12 years old.
Daniel is 10 years old.

Melissa, Becky and Daniel share £28 in the ratio of their ages.
Becky gives a third of her share to her mother.

How much should Becky now have?

£ .....

Q15

(Total 4 marks)

Leave blank

16. The diagram shows a right-angled triangle.

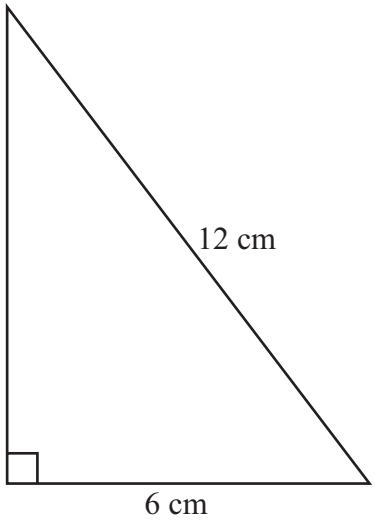


Diagram **NOT** accurately drawn

Calculate the area of the right-angled triangle.
Give your answer correct to 2 decimal places.

..... cm^2 **Q16**

(Total 4 marks)

Leave blank

17. The exchange rate in London is £1 = €1.14
The exchange rate in Paris is €1 = £0.86

Elaine wants to change some pounds into euros.

In which of these cities would Elaine get the most euros?
You must show all of your working.

.....

Q17

(Total 3 marks)

TOTAL FOR PAPER: 60 MARKS

END