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

Paper Reference(s)

5534/15

Examiner's use only

Team Leader's use only

Edexcel GCSE

Mathematics B – 1388

Paper 15 (Calculator)

Foundation Tier

Monday 11 June 2007 – 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 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 62.
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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Turn over

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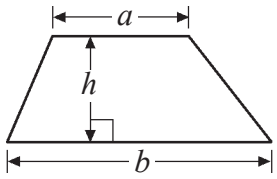
GCSE Mathematics 1387/8

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



Leave blank

Answer ALL TWENTY questions.

Write your answers in the spaces provided.

You must write down all stages in your working.

1. Here are some patterns made using sticks.

Pattern number 1 Pattern number 2 Pattern number 3

(a) In the space below, complete Pattern number 4.

Pattern number 4

(1)

(b) Complete the table.

Pattern number	1	2	3	4	5
Number of sticks	4	7	10		

(1)

(c) How many sticks are used in Pattern number 10?

.....

(1)

Q1

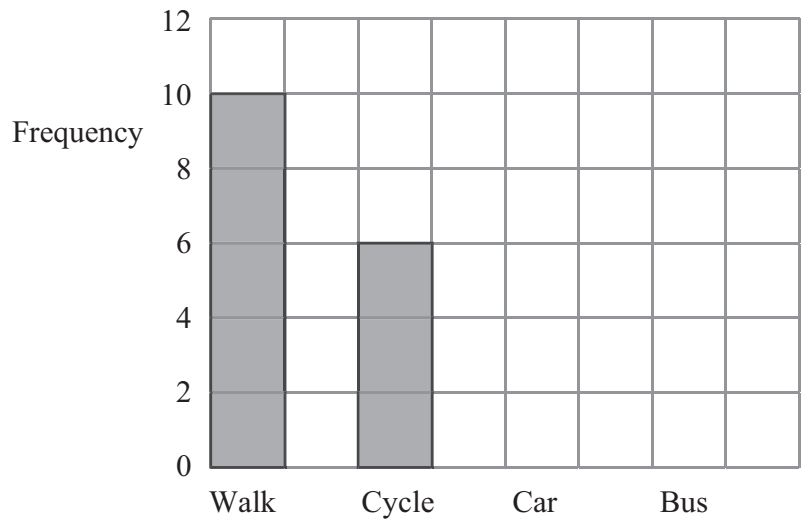
(Total 3 marks)

Turn over

Leave blank

2. Sophie asked the students in her class how they travelled to school.

The bar chart shows some information about the results, for everyone in Sophie's class.



4 students travel to school by car.
7 students travel to school by bus.

(a) Complete Sophie's bar chart.

(2)

(b) How many students in Sophie's class cycle to school?

.....

(1)

(c) Which method of travelling to school is used by the greatest number of students in Sophie's class?

.....

(1)

(d) Work out the total number of students Sophie asked.

.....

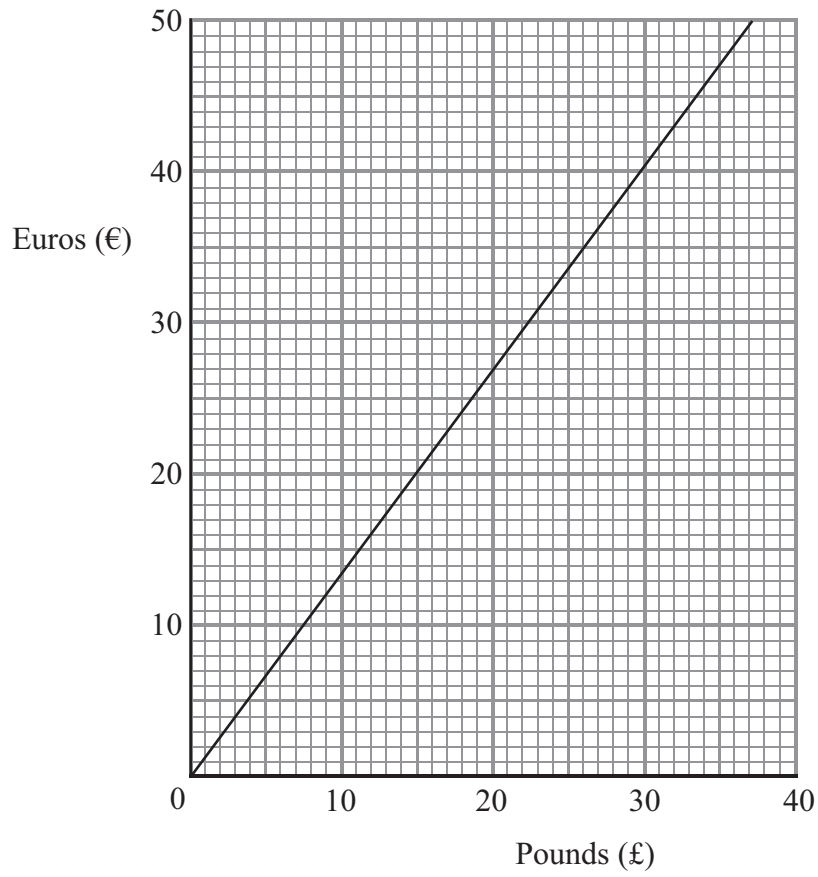
(1)

(Total 5 marks)

Q2

Leave blank

3. The conversion graph can be used to change between pounds (£) and Euros (€).



(a) Use the graph to change 30 pounds to Euros.

€ .....

(1)

(b) Use the graph to change 16 Euros to pounds.

£ .....

(1)

Q3

(Total 2 marks)

Leave blank

4. Here is part of a railway timetable.

Manchester	05 15	06 06	06 45	07 05	07 15	07 45
Stockport	05 26	06 16	06 55	07 15	07 25	07 55
Macclesfield	05 39	06 29	07 08		07 38	08 08
Stoke-on-Trent	05 54	06 45	07 24		07 54	08 24
Stafford	06 12		07 41		08 11	
London Euston	08 07	08 26	09 06	09 11	09 50	10 08

A train leaves Manchester at 06 45

(a) (i) At what time should this train get to London Euston?

.....

(ii) How long should it take to travel between Manchester and Stoke-on-Trent?

..... minutes
(2)

Mark has to go to a meeting in Stafford.
He will catch the train in Stockport.
He needs to arrive in Stafford **before** 08 00

(b) Write down the time of the latest train he can catch from Stockport.

.....
(1)

Leave blank

(c) Work out how long it should take the 07 05 train from Manchester to get to London Euston.
Give your answer in hours and minutes.

..... hours ..... minutes
(1)

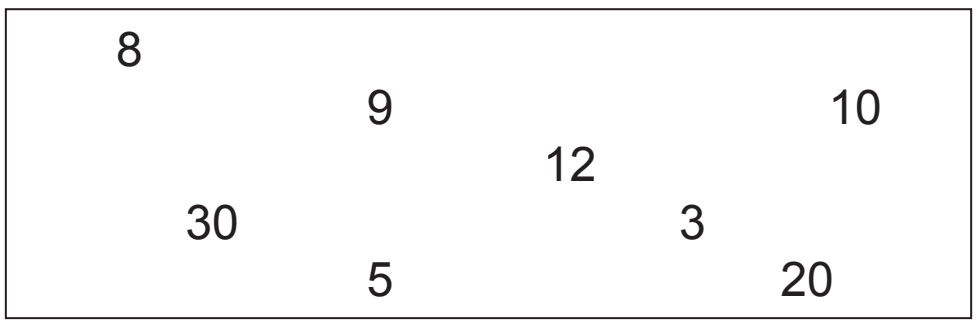
The 06 45 train from Manchester takes more time to get to London Euston than the 07 05 train from Manchester.

(d) Work out how many more minutes the 06 45 train takes.

..... minutes
(2) **Q4**

(Total 6 marks)

5.



Using only the numbers in the rectangle, write down

(i) an even number

.....

(ii) a multiple of 4

.....

(iii) a factor of 15

..... **Q5**

(Total 3 marks)

Leave blank

6. The table shows the highest and lowest temperatures one day in London and Moscow.

	Highest	**Lowest**
London	8°C	–6°C
Moscow	–3°C	–8°C

(a) Work out the difference between the **lowest** temperature in London and the **lowest** temperature in Moscow.

..... °C
(1)

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

..... °C
(1)

Q6

(Total 2 marks)

7.

Waxworks

Adult ticket: £8.50
Child ticket: £4.50

Mr and Mrs Jones take their three children to the Waxworks.
Mrs Jones pays for 2 adult tickets and 3 child tickets.
She pays with a £50 note.

How much change should she receive from £50?

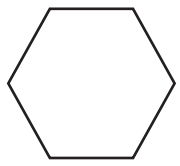
£ .....

Q7

(Total 3 marks)

Leave blank

8.



This shape is a regular polygon.

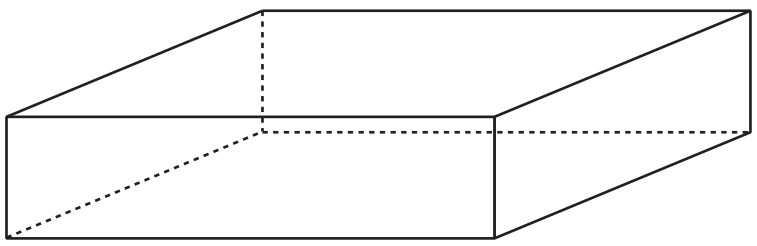
Write down the special name for this type of regular polygon.

.....

(Total 1 mark)

Q8

9. On the diagram, draw in **one** plane of symmetry for the cuboid.



(Total 2 marks)

Q9

10. The two-way table shows some information about students in Years 7, 8 and 9.

	Year 7	**Year 8**	**Year 9**	**Total**
Can swim		61	74	
Cannot swim	33			60
Total			84	250

Complete the two-way table.

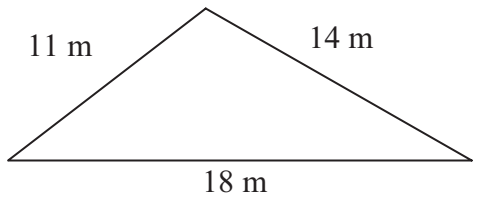
Q10

(Total 3 marks)

Leave blank

11. Here is a sketch of a triangle.

Diagram **NOT** accurately drawn



The lengths of the sides of the triangle are 18 m, 14 m and 11 m.

Use a scale of 1 cm to 2 m to make an accurate scale drawing of the triangle.
The 18 m line has been drawn to scale below.

18 m

(Total 2 marks)

Q11

Leave blank

12. (a) Use your calculator to work out $\dfrac{4.7}{9.4-3.5}$

Write down all the figures on your calculator display.

.....

(2)

(b) Write down your answer to (a) correct to 1 significant figure.

.....

(1)

Q12

(Total 3 marks)

Leave blank

13. Jamie goes on holiday to Florida.
The exchange rate is £1 = 1.70 dollars.

He changes £900 into dollars.

How many dollars should he get?

..... dollars

(Total 2 marks)

Q13

14. Anthony and Ben share £420 in the ratio 5 : 1

How much money does Ben get?

£ .....

(Total 2 marks)

Q14

Leave blank

15. Tom the plumber charges £35 for each hour he works at a job, plus £50
The amount Tom charges, in pounds, can be worked out using this rule.

> Multiply the number of hours he works by 35
>
> Add 50 to your answer

Tom works for 3 hours at a job.

(a) Work out how much Tom charged.

£ .....
(2)

At his next job Tom charged the customer £260

(b) How many hours did Tom work?

..... hours
(3)

Tom works h hours at a job.
He charges P pounds.

(c) Write down a formula for P in terms of h.

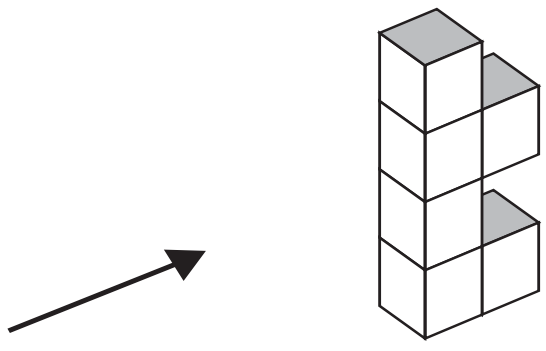
.....
(3)

(Total 8 marks)

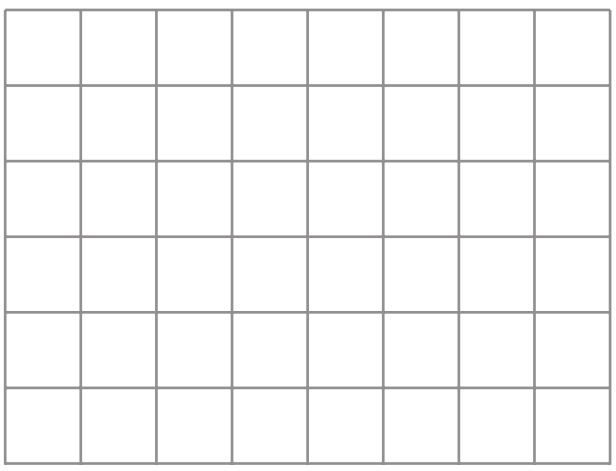
Q15

Leave blank

16. The diagram shows a solid object made of 6 identical cubes.

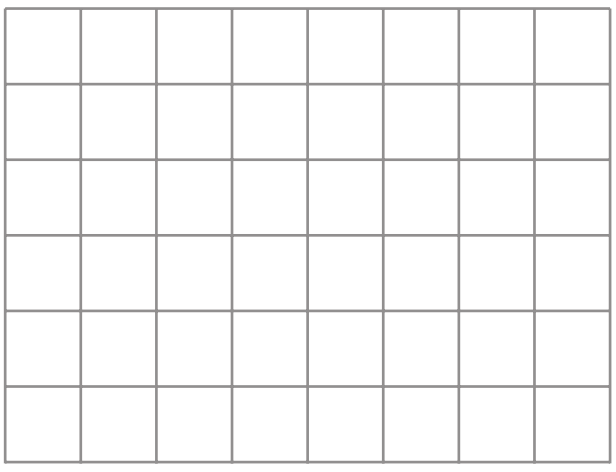


(a) On the grid below, draw the side elevation of the solid object from the direction of the arrow.



(2)

(b) On the grid below, draw the plan of the solid object.



(2) **Q16**

(Total 4 marks)

Leave blank

17. The diagram shows a solid triangular prism.

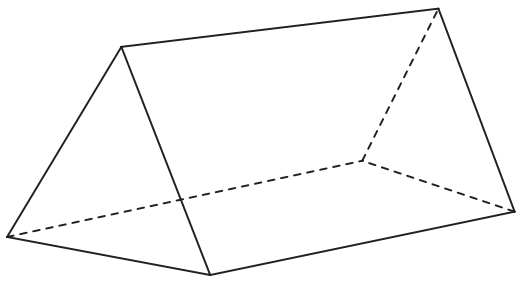


Diagram **NOT** accurately drawn

Write down

(i) the number of faces .....

(ii) the number of edges .....

(iii) the number of vertices .....

(Total 3 marks)

Q17

18. A concert ticket costs £45 plus a booking charge of 15%.

Work out the total cost of a concert ticket.

£ .....

(Total 3 marks)

Q18

Leave blank

19.

Great Britain Spain

The motorway speed limit in Great Britain is 70 miles per hour.
The motorway speed limit in Spain is 120 kilometres per hour.

Which of these speed limits is the lowest speed?
You must show working to explain your answer.

.....

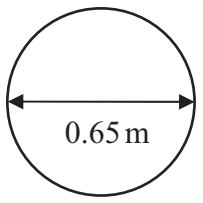
Q19

(Total 3 marks)

20. The diameter of a wheel on Harry's bicycle is 0.65 m.

Calculate the circumference of the wheel.
Give your answer correct to 2 decimal places.

Diagram **NOT** accurately drawn



..... m

Q20

(Total 2 marks)

TOTAL FOR PAPER: 62 MARKS

END