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

Wednesday 15 June 2005 – 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

There are 17 questions in this question paper. The total mark for this paper is 62.
The marks for individual questions and the parts of questions are shown in round brackets: e.g. **(2)**.
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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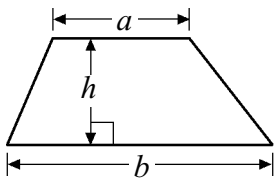
edexcel

GCSE Mathematics 1387/8

Formulae: Foundation Tier

You must not write on this page.
Anything you write on this page will gain NO credit

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



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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. Daniel carried out a survey of his friends' favourite flavour of crisps.

Here are his results.

Plain	Chicken	Bovril	Salt & Vinegar	Plain
Salt & Vinegar	Plain	Chicken	Plain	Bovril
Plain	Chicken	Bovril	Salt & Vinegar	Bovril
Bovril	Plain	Plain	Salt & Vinegar	Plain

(a) Complete the table to show Daniel's results.

Flavour of crisps	**Tally**	**Frequency**
Plain		
Chicken		
Bovril		
Salt & Vinegar		

(3)

(b) Write down the number of Daniel's friends whose favourite flavour was Salt & Vinegar.

.....

(1)

(c) Which was the favourite flavour of most of Daniel's friends?

.....

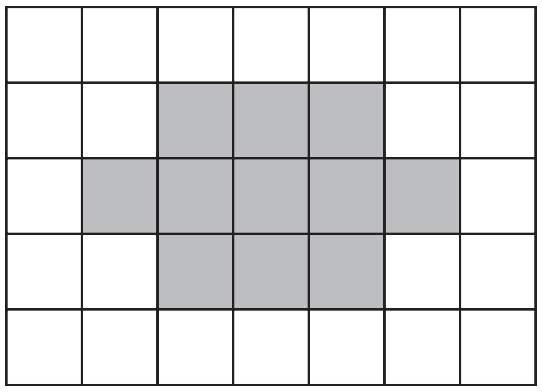
(1)

(Total 5 marks)

Q1

Leave blank

2. A shaded shape has been drawn on the centimetre grid.



The shaded shape has **two** lines of symmetry.

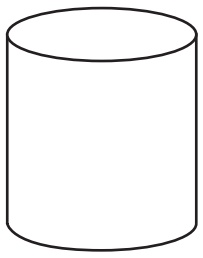
Draw the **two** lines of symmetry on the shaded shape.

(Total 2 marks)

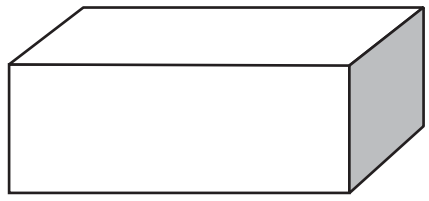
Q2

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

(i)



(ii)



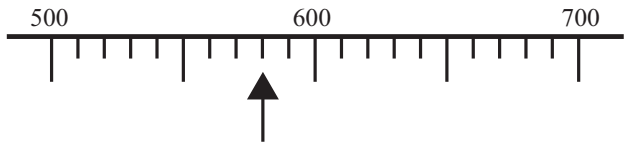
(i) .....

(ii) .....

(Total 2 marks)

Q3

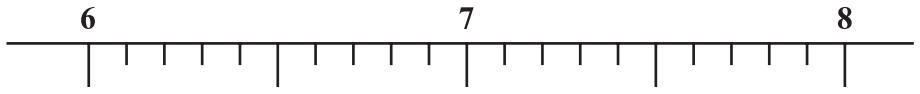
4.



(a) Write down the number marked with an arrow.

.....

(1)



(b) Find the number 6.7 on the number line.

Mark it with an arrow (↑).

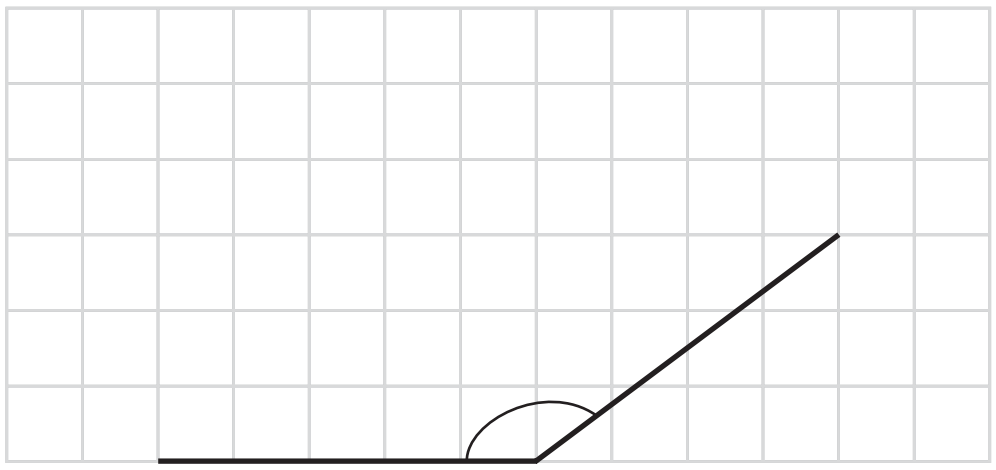
(1)

(Total 2 marks)

Q4

Leave blank

5. The diagram shows two sides of a rhombus drawn on a grid of centimetre squares.



(a) (i) Measure the size of the angle between these two sides.

..... °

(ii) What type of angle have you measured?

.....

(2)

(b) Complete accurately the drawing of the rhombus.

(1)

(Total 3 marks)

Q5

6. Chloe made a list of her homework marks.

4 5 5 5 4 3 2 1 4 5

(a) Write down the mode of her homework marks.

.....

(1)

(b) Work out her mean homework mark.

.....

(2)

(Total 3 marks)

Q6

Leave blank

7. (a) Simplify $d + d + d$

.....
(1)

(b) Simplify $2c + 4c + c$

.....
(1)

(c) Solve $x + 7 = -3$

$x =$ .....
(1)

(d) Solve $5y + 3 = 15$

$y =$ .....
(2)

Q7

(Total 5 marks)

8. Alison travels by car to her meetings.
Alison's company pays her 32p for each mile she travels.

One day Alison writes down the distance readings from her car.

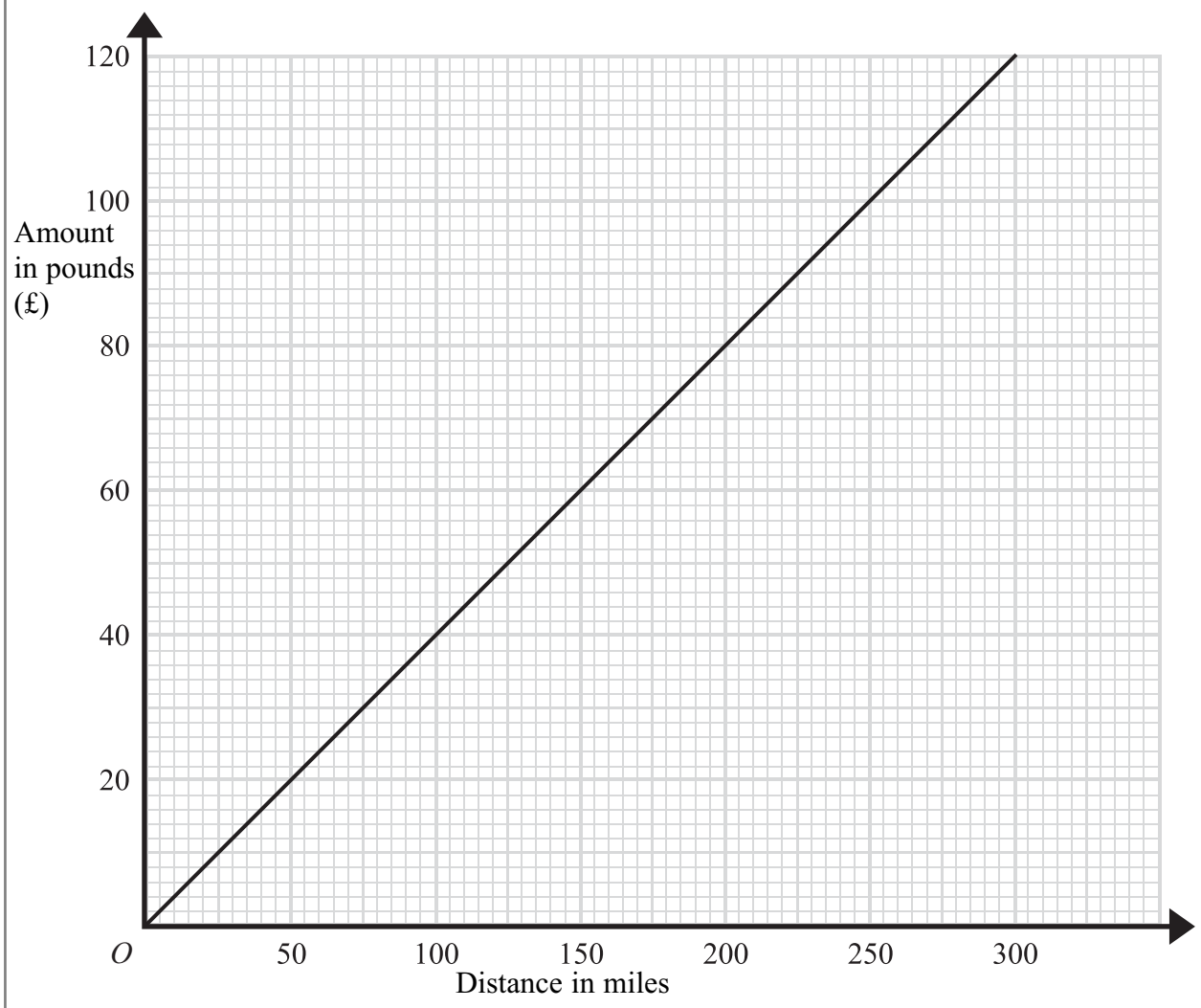
Start of the day: 2430 miles
End of the day: 2658 miles

(a) Work out how much the company pays Alison for her day's travel.

£ .....
(4)

Leave blank

Tom also travels by car to his meetings.
Tom's company works out the amount it will pay him for the distance he travels.
It uses the graph below.



(b) Use the graph to write down

(i) the amount Tom's company pays him when he travels 200 miles,

£ .....

(ii) the distance Tom travels when his company pays him £50.

.....miles

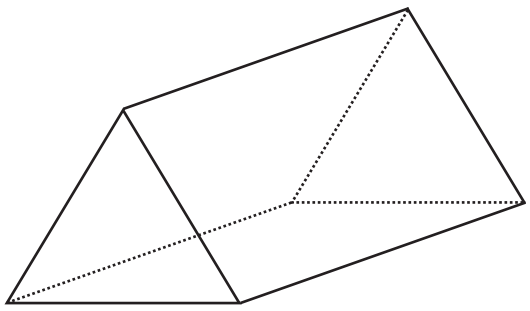
(2)

(Total 6 marks)

Q8

Leave blank

9.



The diagram shows a triangular prism.
The cross-section of the prism is an equilateral triangle.

(a) On the diagram, draw in **one** plane of symmetry for the triangular prism.

(2)

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

(2)

Leave blank

(c) In the space below, use ruler and compasses to construct an equilateral triangle with sides of length 6 centimetres.
You must show all construction lines.
One side of the triangle has already been drawn for you

(2)

(Total 6 marks)

Q9

10. Andrew, Brenda and Callum each collect football stickers.

Andrew has x stickers.
Brenda has three times as many stickers as Andrew.

(a) Write down an expression for the number of stickers that Brenda has.

.....

(1)

Callum has 9 stickers less than Andrew.

(b) Write down an expression for the number of stickers that Callum has.

.....

(1)

(Total 2 marks)

Q10

Leave blank

11. (a) Work out the value of $3.8^2 - \sqrt{75}$

Write down all the figures on your calculator display.

.....

(2)

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

.....

(1)

(Total 3 marks)

Q11

12. The cost of a book is £2.80
Mrs Green has £60 to spend.

(a) Work out the greatest number of these books that Mrs Green can buy.

.....

(2)

Daniel is going to buy a computer game for £40.
The price of the computer game is reduced by 20%.

(b) Work out the price Daniel pays for the computer game.

£ .....

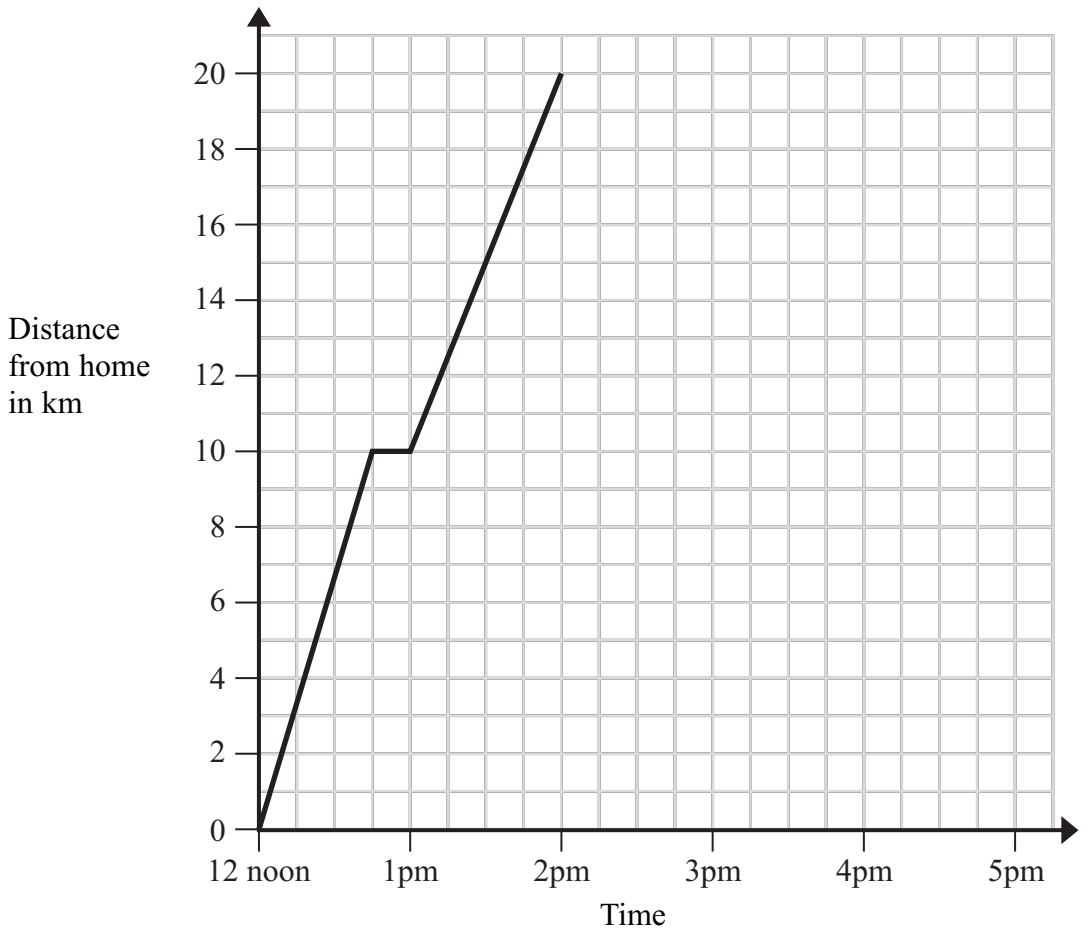
(3)

(Total 5 marks)

Q12

Leave blank

13. A man left home at 12 noon to go for a cycle ride.
The travel graph represents part of the man's journey.



At 12.45pm the man stopped for a rest.

(a) For how many minutes did he rest?

..... minutes
(1)

(b) Find his distance from home at 1.30pm.

..... km
(1)

The man stopped for another rest at 2pm.
He rested for one hour.
Then he cycled home at a steady speed. It took him 2 hours.

(c) Complete the travel graph.

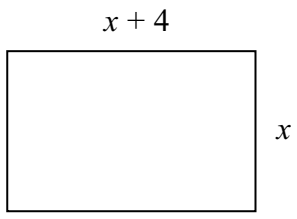
(2)

(Total 4 marks)

Q13

Leave blank

14. The width of a rectangle is x centimetres.
The length of the rectangle is $(x + 4)$ centimetres.



(a) Find an expression, in terms of x, for the perimeter of the rectangle.
Give your expression in its simplest form.

.....

(2)

The perimeter of the rectangle is 54 centimetres.

(b) Work out the length of the rectangle.

..... cm

(3)

(Total 5 marks)

Q14

Leave blank

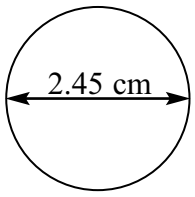
15. A 10 pence coin is made from copper and nickel.
The ratio of the weight of copper to the weight of nickel is 18:6

(a) Write the ratio 18:6 in its simplest form.

.....
(1)

The diameter of the 10 pence coin is 2.45 cm.

(b) Work out the circumference of the coin.
Give your answer correct to 1 decimal place.



..... cm
(2)

(Total 3 marks)

Q15

Leave blank

16. Change 7 m^2 to cm^2.

..... cm^2

(Total 2 marks)

Q16

17. Alistair sells books.
He sells each book for £7.60 plus VAT at $17\frac{1}{2}$ %.

He sells 1650 books.

Work out how much money Alistair receives.

£ .....

(Total 4 marks)

Q17

TOTAL FOR PAPER: 62 MARKS

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