Centre No.						Paper Reference							Surname	Initial(s)
Candidate No.						1	3	8	0	/	1	F	Signature	

Paper Reference(s)

1380/1F

Examiner's use only

Team Leader's use only

Edexcel GCSE

Mathematics (Linear) – 1380

Paper 1 (Non-Calculator)

Foundation Tier

Friday 2 March 2012 – Afternoon

Time: 1 hour 30 minutes

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 25 questions in this question paper. The total mark for this paper is 100.
There are 24 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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P 4 0 6 3 0 A 0 1 2 4

Turn over

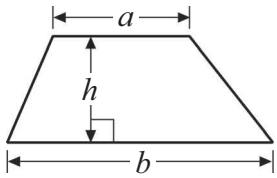
PEARSON

GCSE Mathematics (Linear) 1380

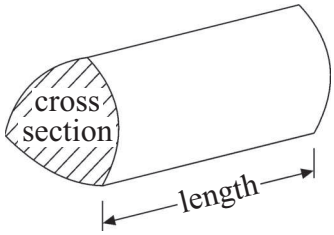
Formulae: Foundation Tier

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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Leave blank

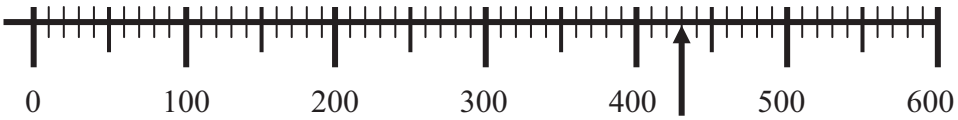
Answer ALL TWENTY FIVE questions.

Write your answers in the spaces provided.

You must write down all stages in your working.

You must NOT use a calculator.

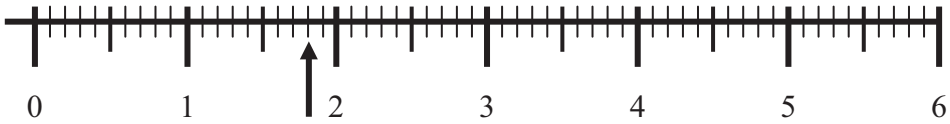
1.



(a) Write down the number marked by the arrow.

.....

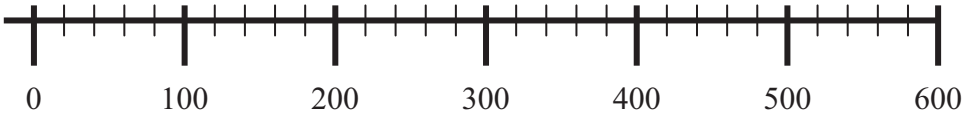
(1)



(b) Write down the number marked by the arrow.

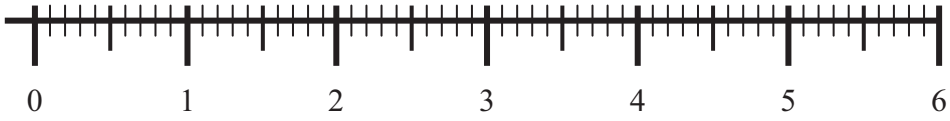
.....

(1)



(c) Find the number 340 on the number line above.
Mark it with an arrow (↑)

(1)



(d) Find the number 4.9 on the number line above.
Mark it with an arrow (↑)

(1)

Q1

(Total 4 marks)

Leave blank

2. (a) Work out 24×20

.....
(1)

(b) Work out $205 - 37$

.....
(2)

(c) Work out $18 + 24 + 12$

.....
(1)

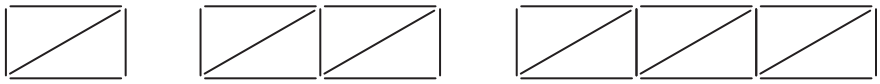
Q2

(Total 4 marks)

P 4 0 6 3 0 A 0 4 2 4

Leave blank

3. Here is part of a sequence of patterns made of sticks.



Pattern number 1 Pattern number 2 Pattern number 3

(a) In the space below, draw Pattern number 4

(1)

(b) Complete the table.

Pattern number	1	2	3	4	5
Number of sticks	5	9	13		

(2)

(c) Work out how many sticks there will be in Pattern number 8

.....

(1)

Josh has 100 sticks.
Josh says he can make a pattern in the sequence using all the sticks.

(d) Is Josh correct?

.....

Give a reason for your answer.

.....

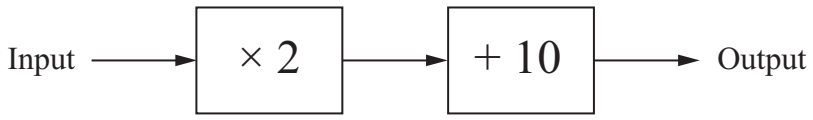
(1)

Q3

(Total 5 marks)

Leave blank

4. Here is a two-stage number machine.
It multiplies by 2 and then adds 10

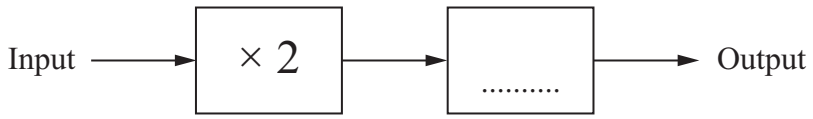


(a) Complete the table.

Input	**Output**
1	12
2	14
5	20
8	.....
.....	40

(2)

Here is a different two-stage number machine.



When the input is 10, the output is 26

(b) Complete the number machine.

(1)

Q4

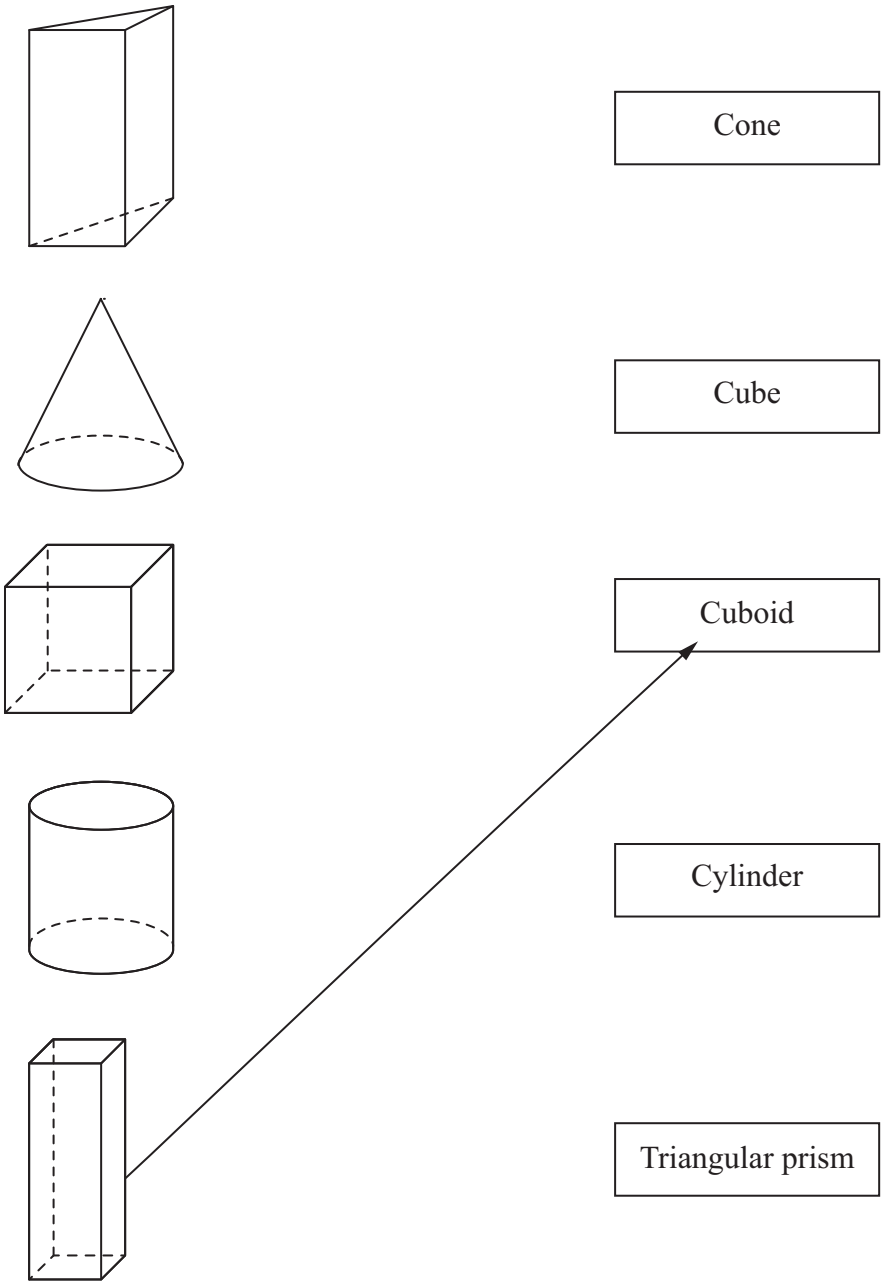
(Total 3 marks)

P 4 0 6 3 0 A 0 6 2 4

Leave blank

5. Here are 5 solid shapes.

(a) Match each solid shape to its name.
One has been done for you.



(3)

(b) How many faces does the cuboid have?

.....

(1)

Q5

(Total 4 marks)

P 4 0 6 3 0 A 0 7 2 4

Turn over

Leave blank

6.

(a) Write down the fraction of the shape that is shaded.
Give your fraction in its simplest form.

.....
(2)

(b) Work out 10% of £50

£.....
(2)

(c) Change $\frac{3}{4}$ to a decimal.

.....
(1)

Q6

(Total 5 marks)

P 4 0 6 3 0 A 0 8 2 4

Leave blank

7. There are 24 men in a room.

$\frac{1}{2}$ of the men are wearing a red shirt.

$\frac{1}{3}$ of the men are wearing a green shirt.

The rest of the men are wearing a blue shirt.

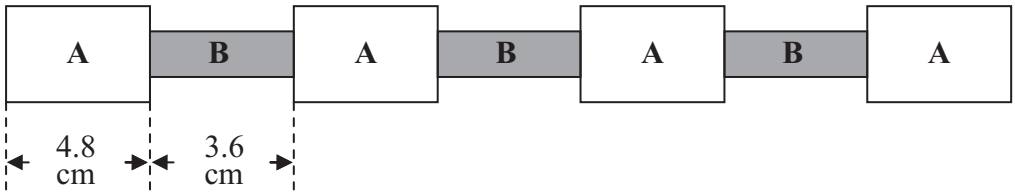
Work out the number of men wearing a blue shirt.

..... **Q7**

(Total 3 marks)

8. Here is a design made from white rectangles and grey rectangles.

Diagram **NOT** accurately drawn



Each white rectangle has a length of 4.8 cm.
Each grey rectangle has a length of 3.6 cm.

Work out the total length of the design.

..... cm **Q8**

(Total 2 marks)

Leave blank

9. (a) Simplify $2x + 2x$

.....
(1)

(b) Simplify $5y - 2y$

.....
(1)

(c) Simplify $2 \times 4p$

.....
(1)

Q9

(Total 3 marks)

10. In the morning Fred walks 400 m from home to school.
After school, he walks 400 m from school to home.

Fred walks to school and back from school on 5 days.

How far does Fred walk in total?
Give your answer in kilometres.

..... km

Q10

(Total 3 marks)

Leave blank

11. Here is a rectangle.

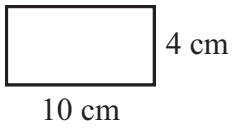


Diagram **NOT** accurately drawn

The length of the rectangle is 10 cm.
The width of the rectangle is 4 cm.

(a) Work out the area of the rectangle.

..... cm^2
(2)

The rectangle is to be enlarged by scale factor 2

(b) Work out the length and the width of the enlarged rectangle.

Length ..... cm

Width ..... cm
(2)

(Total 4 marks)

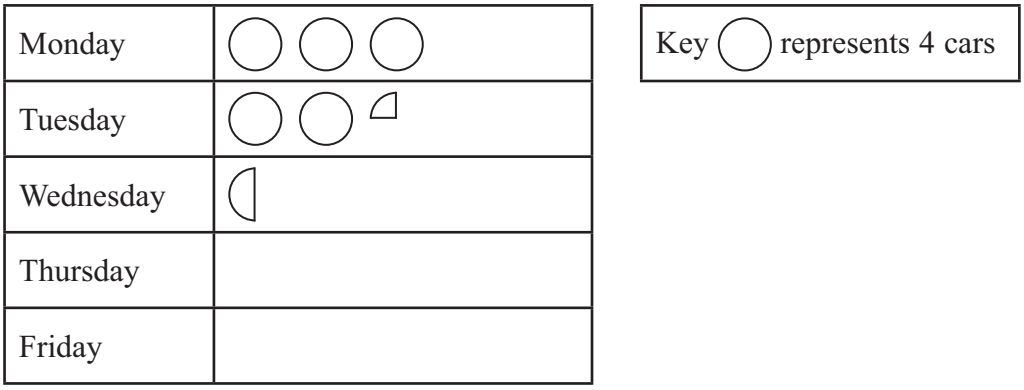
Q11

P 4 0 6 3 0 A 0 1 1 2 4

Turn over

Leave blank

12. Here is an incomplete pictogram.
It shows the numbers of cars in a car park at 4 pm on Monday, Tuesday and Wednesday of one week.



(a) Write down the number of cars in the car park at 4 pm on Monday.

.....
(1)

(b) Write down the number of cars in the car park at 4 pm on Tuesday.

.....
(1)

On Thursday, there were 16 cars in the car park at 4 pm.

(c) Show this on the pictogram.

(1)

On Friday, there were 10 cars in the car park at 4 pm.

(d) Show this on the pictogram.

(1) **Q12**

(Total 4 marks)

P 4 0 6 3 0 A 0 1 2 2 4

Leave blank

13. Here are 5 rows of numbers.

Row A	2	4	6	8	10	12	14	16
Row B	3	5	7	9	11	13	15	17
Row C	2	3	5	7	11	13	17	……
Row D	1	2	5	10	20	50	100	200
Row E	1	2	4	8	16	32	64	……

All the numbers are even in one of the rows.

(a) Which row?

.....
(1)

The numbers in row C are the first 7 prime numbers written in order of size.

(b) Write down the next prime number.

.....
(1)

(c) Write down a square number from row D.

.....
(1)

The numbers in row E are the first seven numbers of a sequence.

(d) Work out the next number in the sequence.

.....
(1)

Q13

(Total 4 marks)

Leave blank

14. (a) What is the sum of the angles in a triangle?

.....°

(1)

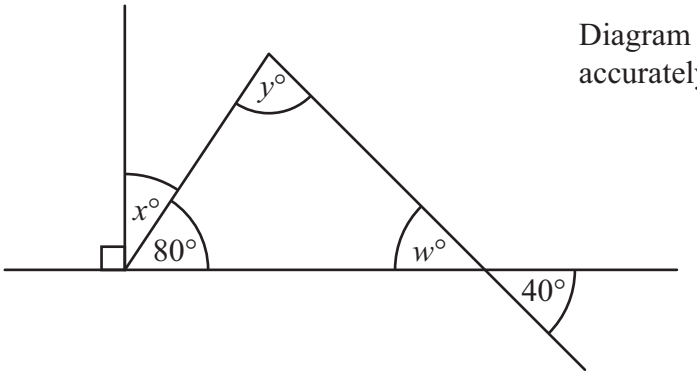


Diagram **NOT** accurately drawn

(b) (i) Write down the value of w.

.....

(ii) Give a reason for your answer.

.....

(2)

(c) Work out the value of x.

.....

(1)

(d) Work out the value of y.

.....

(2)

Q14

(Total 6 marks)

P 4 0 6 3 0 A 0 1 4 2 4

Leave blank

15. Here is a menu in a café.

Menu	
Starter	**Main Course**
Soup	Chicken
Melon	Fish
	Omelette

A meal is a starter and a main course.
One possible meal is Soup and Chicken, (S, C).

Charlie wants to choose a meal.

(a) Make a list of all the different meals she can have.
One has been done for you.

(S, C) ……..

……

(2)

A meal is chosen at random.

(b) What is the probability that the meal will be Melon and Chicken?

.....

(1)

The café adds fruit juice as another starter.

Charlie says 'Now there will be one more meal to choose from'.

(c) Show that Charlie is wrong.

.....

.....

(1)

Q15

(Total 4 marks)

Leave blank

16. Here is a sketch of a quadrilateral.

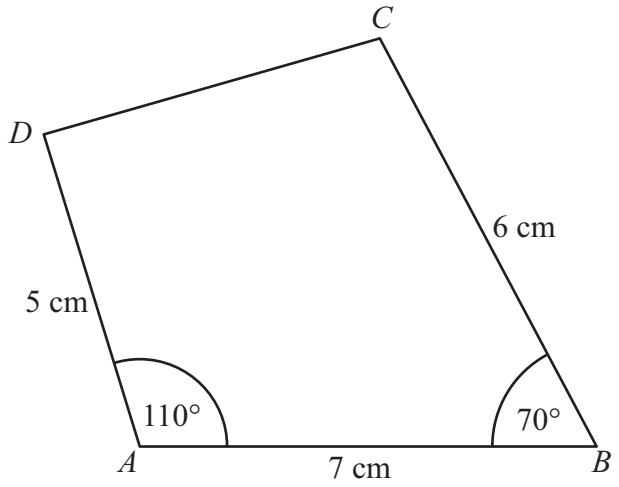


Diagram **NOT** accurately drawn

Make an accurate drawing of the quadrilateral *ABCD* in the space below.
The point *A*, marked with a cross (×), has been drawn for you.

A ×

Q16

(Total 4 marks)

P 4 0 6 3 0 A 0 1 6 2 4

Leave blank

17. (a) Work out $\frac{2}{3} \times \frac{9}{10}$

Give your answer in its simplest form.

.....

(2)

(b) Eric, the cat, eats $\frac{2}{3}$ of a tin of cat food every day.

How much cat food will Eric eat in 7 days?

..... tins

(2)

Q17

(Total 4 marks)

Leave blank

18. There are only red counters, blue counters and green counters in a bag.
There are 5 red counters.
There are 6 blue counters.
There is 1 green counter.

Jim takes at random a counter from the bag.

(a) (i) Work out the probability that he takes a red counter.

.....

(ii) Work out the probability that he takes a counter that is **not** red.

.....
(3)

Jim puts the counter back in the bag.
He then puts some more green counters into the bag.

The probability of taking at random a red counter is now $\frac{1}{3}$

(b) Work out the number of green counters that are now in the bag.

.....
(2) **Q18**

(Total 5 marks)

P 4 0 6 3 0 A 0 1 8 2 4

Leave blank

19. Work out an estimate for the value of $\dfrac{60.2 \times 0.799}{223}$

Give your answer as a decimal.

.....

(Total 3 marks)

Q19

20. (a) Solve $13x + 1 = 11x + 8$

$x =$ .....

(2)

(b) Solve $\dfrac{2y}{5} = 4$

$y =$ .....

(2)

(Total 4 marks)

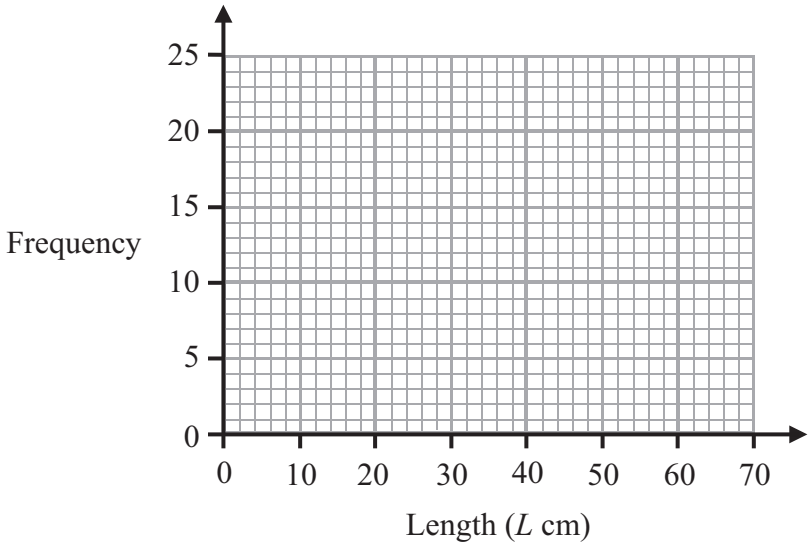
Q20

Leave blank

21. The table gives information about the lengths of the branches on a bush.

Length (L cm)	**Frequency**
$0 \leqslant L < 10$	20
$10 \leqslant L < 20$	12
$20 \leqslant L < 30$	10
$30 \leqslant L < 40$	8
$40 \leqslant L < 50$	6
$50 \leqslant L < 60$	0

(a) Draw a frequency polygon to show this information.



(2)

(b) Work out the total number of branches on the bush.

.....

(2)

(c) Write down the modal class interval.

.....

(1)

Q21

(Total 5 marks)

P 4 0 6 3 0 A 0 2 0 2 4

Leave blank

22. (a) Simplify $2a + 3b - a - b$

.....
(2)

(b) Expand $4(2m - 3n)$

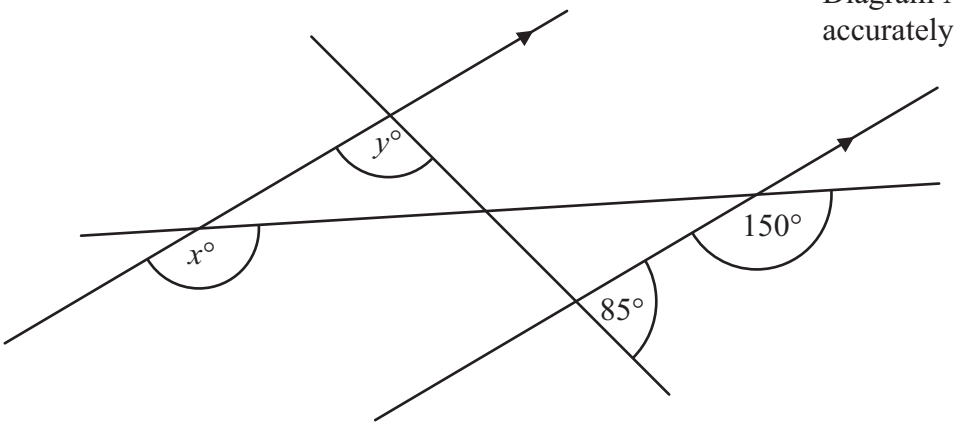
.....
(1)

Q22

(Total 3 marks)

23.

Diagram **NOT** accurately drawn



(a) Find the value of x.

.....
(1)

(b) Find the value of y.
Give reasons for your answer.

.....
(2)

Q23

(Total 3 marks)

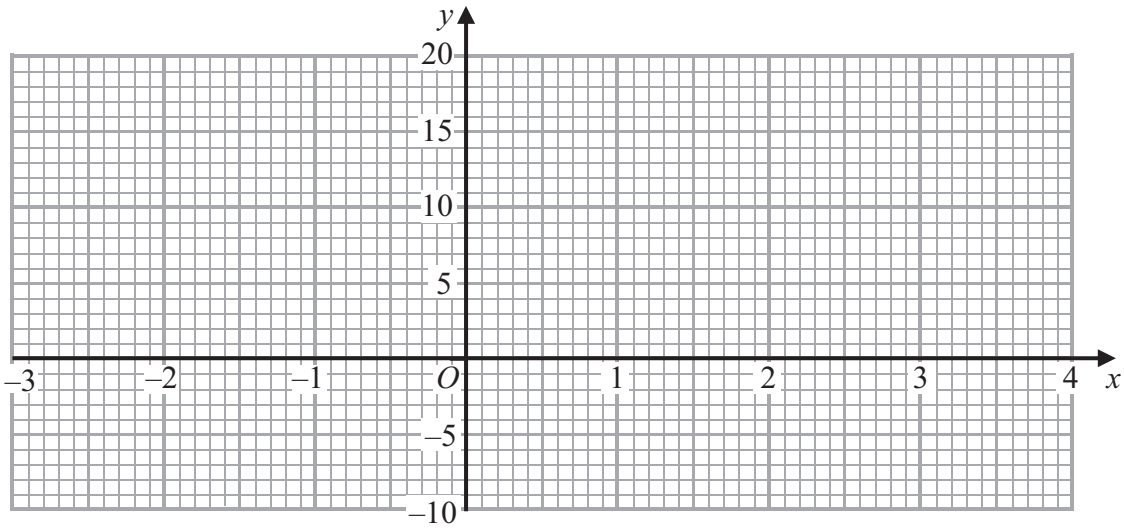
Leave blank

24. (a) Complete the table of values for $y = 5x + 2$

x	−2	−1	0	1	2	3
y	−8		2			17

(2)

(b) On the grid, draw the graph of $y = 5x + 2$ for values of x from −2 to 3



(2)

(c) Use your graph to estimate the value of x when $y = 10$

.....

(1)

Q24

(Total 5 marks)

P 4 0 6 3 0 A 0 2 2 2 4

Leave blank

25.

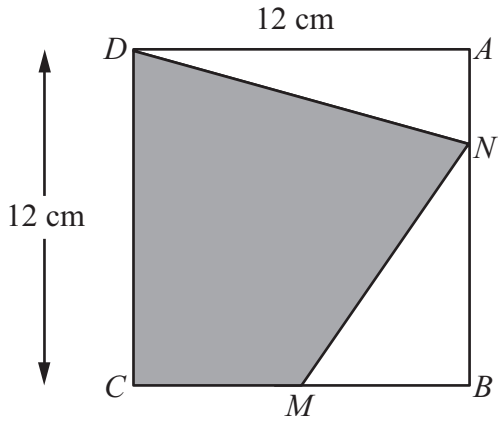


Diagram **NOT** accurately drawn

ABCD is a square of side 12 cm.
M is the midpoint of *CB*.
N is a point on *AB*.

$AN = \frac{1}{4} AB$.

Calculate the area of the shaded region *CDNM*.

..... cm^2

Q25

(Total 6 marks)

TOTAL FOR PAPER: 100 MARKS

END

P 4 0 6 3 0 A 0 2 3 2 4

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