Write your name here

Surname	Other Names

Mathematics
June 2018 Paper 3 (Calculator Allowed)
Part 1 (First half of the paper)
Edexcel Foundation Tier

Time: 45 minutes

Q	Topic	Max Mark	My Marks
1	Fractions, Decimals and Percentages	1	
2	Fractions, Decimals and Percentages	1	
3	Rounding	1	
4	Sequences (Term to Term)	3	
5	Place Value	2	
6	Factors	2	
7	Calculation Problems	2	
8	Using a Calculator	3	
9	Time	4	
10	Calculation (Rate of Pay) Problems	3	
11	One Amount as a Fraction of Another	2	
12	Scale Drawings	5	
13	The Equation of a Line	2	
14	Stem and Leaf Diagrams	5	
15	Order of Operations, Averages	2	
	Total	38	

Answer ALL questions.

Write your answers in the spaces provided.

You must write down all the stages in your working.

1 Write $\dfrac{9}{10}$ as a decimal.

....

(Total for Question 1 is 1 mark)

2 Write 0.3 as a percentage.

....................................%

(Total for Question 2 is 1 mark)

3 Write the number 2538 correct to the nearest hundred.

....

(Total for Question 3 is 1 mark)

4 Here are the first 4 terms of a sequence.

$$2 \qquad 9 \qquad 16 \qquad 23$$

(a) (i) Write down the next term in the sequence.

....

(1)

  (ii) Explain how you got your answer.

....

(1)

(b) Work out the 10th term of the sequence.

....

(1)

(Total for Question 4 is 3 marks)

5 Here are four digits.

7   3   4   9

(a) Use three of these digits to write down the largest possible 3-digit number.

....

(1)

(b) Here are four different digits.

8   2   1   6

Put one of these digits in each box to give the smallest possible answer to the sum. You must use each digit only once.

◻◻ + ◻◻

(1)

(Total for Question 5 is 2 marks)

6 Write down all the factors of 30

....

(Total for Question 6 is 2 marks)

7 David has twice as many cousins as Becky.
Becky has twice as many cousins as Nishat.

Nishat has 6 cousins.

How many cousins does David have?

....

8 (a) Find the value of $\sqrt{1.44 \times 3.61}$

....

(1)

(b) Find the value of $(3.54 - 0.96)^2 - 4.096$

....

(2)

9 This is part of a bus timetable between Bury and Manchester.

Bury	08 25	08 55	09 15	09 30	09 45	10 05
Whitefield	08 34	09 04	09 24	09 39	09 54	10 14
Heaton Park	08 46	09 16	09 36	09 51	10 06	10 27
Cheetham	08 56	09 26	09 46	10 01	10 16	10 37
Manchester	09 05	09 35	09 55	10 10	10 25	10 48

(a) How many minutes should the 08 25 bus take to go from Bury to Manchester?

.... minutes

(1)

Daniel goes from Whitefield to Manchester by bus.

Daniel takes 17 minutes to get from his house to the bus stop in Whitefield.
He takes 15 minutes to get from the bus stop in Manchester to work.

Daniel has to get to work by 10 am.
He leaves his house at 8.45 am.

(b) Does Daniel get to work by 10 am?
You must show all your working.

(3)

(Total for Question 9 is 4 marks)

10 Bronwin works in a restaurant.

The table gives her rates of pay.

Day	Rate of pay
Monday to Friday	£8.40 per hour
Weekend	£11.20 per hour

Bronwin worked for a total of 20 hours last week.
She worked 8 of these 20 hours at the weekend.

Show that Bronwin was paid less than £200 last week.
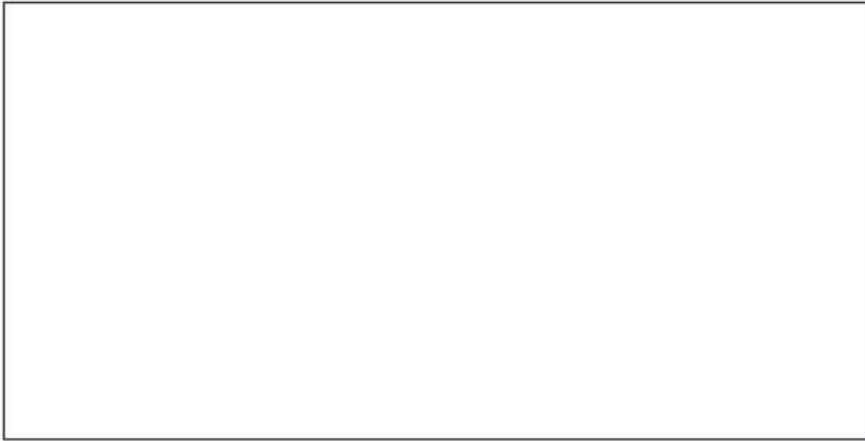
(Total for Question 10 is 3 marks)

11 Last year the cost of a season ticket for a football club was £560
This year the cost of a season ticket for the club has been increased to £600

Write down the increase in the cost of a season ticket as a fraction of last year's cost.

....

(Total for Question 11 is 2 marks)

12 The diagram shows a scale drawing of a tennis court.

The scale of the drawing is $1:200$

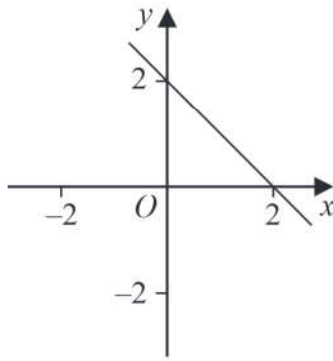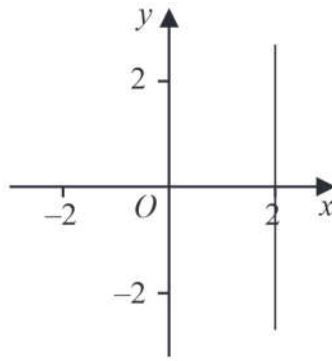Work out the perimeter of the real tennis court.
Give your answer in metres.

.... metres

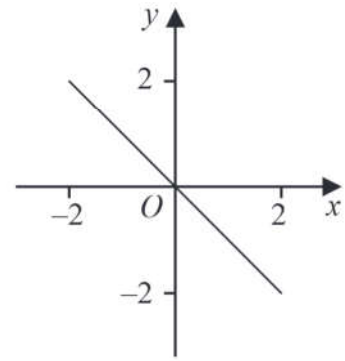**(Total for Question 12 is 5 marks)**

13 Here are six straight line graphs.

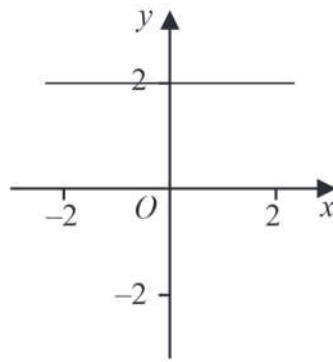Graph **A**   Graph **B**   Graph **C**
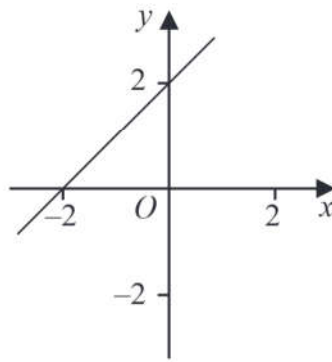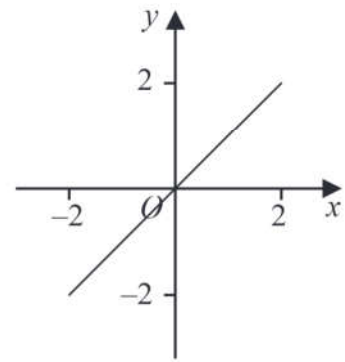

Graph **D**   Graph **E**   Graph **F**

Match each equation in the table to the correct graph.
Write the letter of the graph in the table.

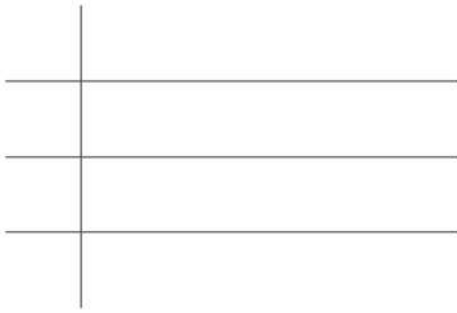| Equation	Graph
$y = 2$	
$y = x$	
$x + y = 2$	

(Total for Question 13 is 2 marks)

14 Here are the marks 20 students got in a French test.

76	82	84	69	80	64	70	81	75	91
87	67	80	70	94	76	81	69	71	77

(a) Show this information in a stem and leaf diagram.

(3)

One of these students is going to be chosen at random.

The pass mark in the French test is 71

Omar writes,

The probability that this student failed the French test is $\frac{1}{4}$

Omar is wrong.

(b) Explain why.

....

....

(2)

(Total for Question 14 is 5 marks)

15 Jenny is asked to find the value of $12 - 2 \times 4$

Here is her working.

$$12 - 2 \times 4 = 10 \times 4 = 40$$

Jenny's answer is wrong.

(a) Explain what Jenny has done wrong.

....

....

(1)

Rehan is asked to find the range of the numbers   3   1   8   7   5

Here is his working.

$$\text{Range} = 5 - 3 = 2$$

This is wrong.

(b) Explain why.

....

....

(1)

(Total for Question 15 is 2 marks)