Please check the examination details below before entering your candidate information

Candidate surname	Other names

Centre Number | Candidate Number

Edexcel Mock Test Papers-Paper2 Test2

Paper 2F

Time 1 hour 30 minutes

Mathematics
PAPER 2 (Calculator)
Foundation Tier

You must have: Ruler graduated in centimetres and millimetres, protractor, pair of compasses, pen, HB pencil, eraser, calculator, Formulae Sheet (enclosed). Tracing paper may be used.

Total Marks

Instructions

- Use **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Answer **all** questions. Answer the questions in the spaces provided – *there may be more space than you need*.
- You must **show all your working**.
- Diagrams are **NOT** accurately drawn, unless otherwise 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.

Information

- The total mark for this paper is 80
- The marks for **each** question are shown in brackets – *use this as a guide as to how much time to spend on each question*.

Advice

- Read each question carefully before you start to answer it.
  Try to answer every question.
- Check your answers if you have time at the end.

Turn over ▶

Answer ALL questions.

Write your answers in the spaces provided.

You must write down all the stages in your working.

1 Write 7529 correct to the nearest hundred.

.....

(Total for Question 1 is 1 mark)

2 Write 0.9 as a fraction.

.....

(Total for Question 2 is 1 mark)

3 Change 6 metres into centimetres.

..... centimetres

(Total for Question 3 is 1 mark)

4 Simplify $5 \times 9t$

.....

(Total for Question 4 is 1 mark)

5 Here is a list of numbers.

10 20 75 100 115

One of these numbers is a multiple of 15

Which number?

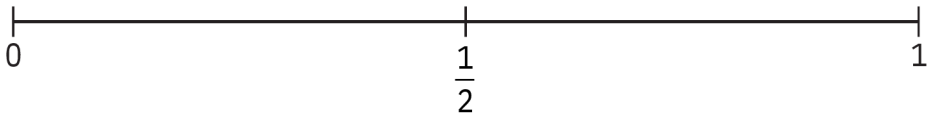
.....

(Total for Question 5 is 1 mark)

DO NOT WRITE IN THIS AREA DO NOT WRITE IN THIS AREA

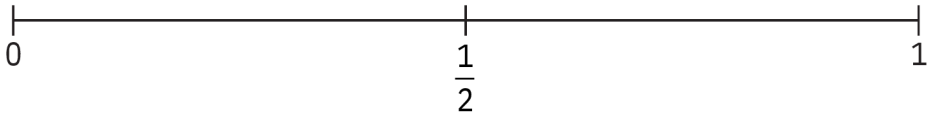
6 Eeshu has a fair ordinary dice. She rolls the dice once.

(a) On the probability scale, mark with a cross (×) the probability that Eeshu gets the number 9



(1)

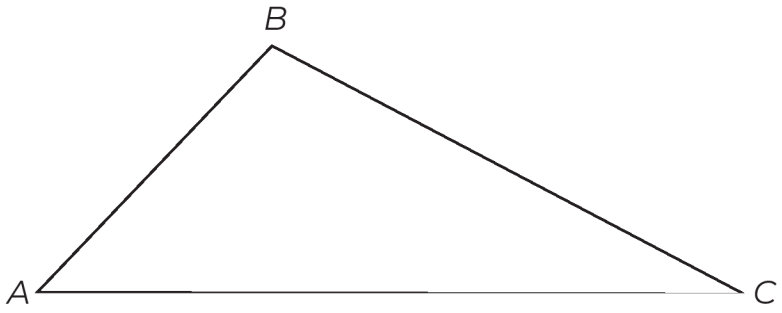
(b) On the probability scale, mark with a cross (×) the probability that Eeshu gets an odd number.



(1)

(Total for Question 6 is 2 marks)

7 Here is a triangle.
The triangle is accurately drawn.



(a) Measure the length of BC.

..... cm

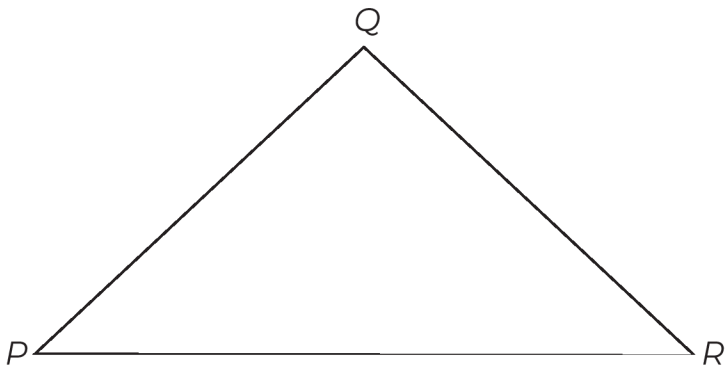
(1)

(b) Measure the size of angle B.

..... °

(1)

Here is a different triangle.



$QP = QR$

(c) Write down the mathematical name of this triangle.

.....

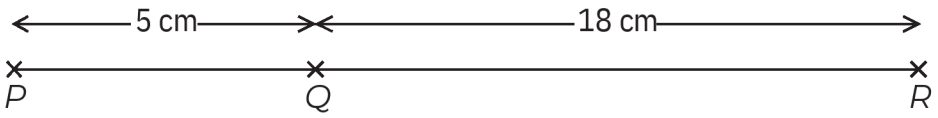
(1)

(Total for Question 7 is 3 marks)

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA DO NOT WRITE IN THIS AREA

8 The diagram shows three motorway service stations P, Q and R on a map.



The map has a scale of 1 cm = 4 km.

Work out the real distance from P to R.

..... km

(Total for Question 8 is 3 marks)

9 Here are the first five terms of a sequence.

3 9 15 21 27

(a) Write down the next term of this sequence.

.....

(1)

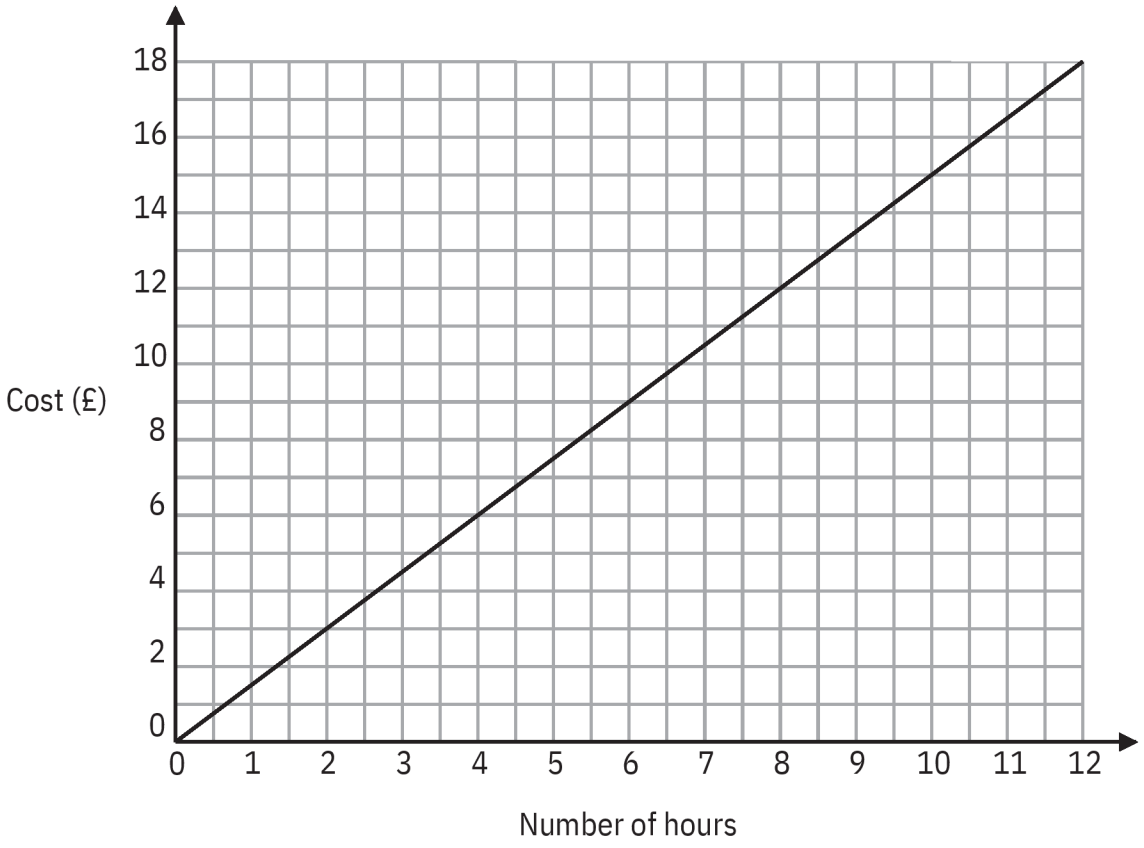
(b) Write down the ratio of the third term to the fifth term.
Give your ratio in its simplest form.

.....

(2)

(Total for Question 9 is 3 marks)

10 This graph can be used to find the cost of parking a car in a car park for up to 12 hours.



(a) Use the graph to find the cost of parking a car for 5 hours.

£.....

(1)

George drives into the car park at 07 00 in the morning.
When he drives out of the car park he has to pay £12

(b) At what time does George drive out of the car park?

.....

(3)

(Total for Question 10 is 4 marks)

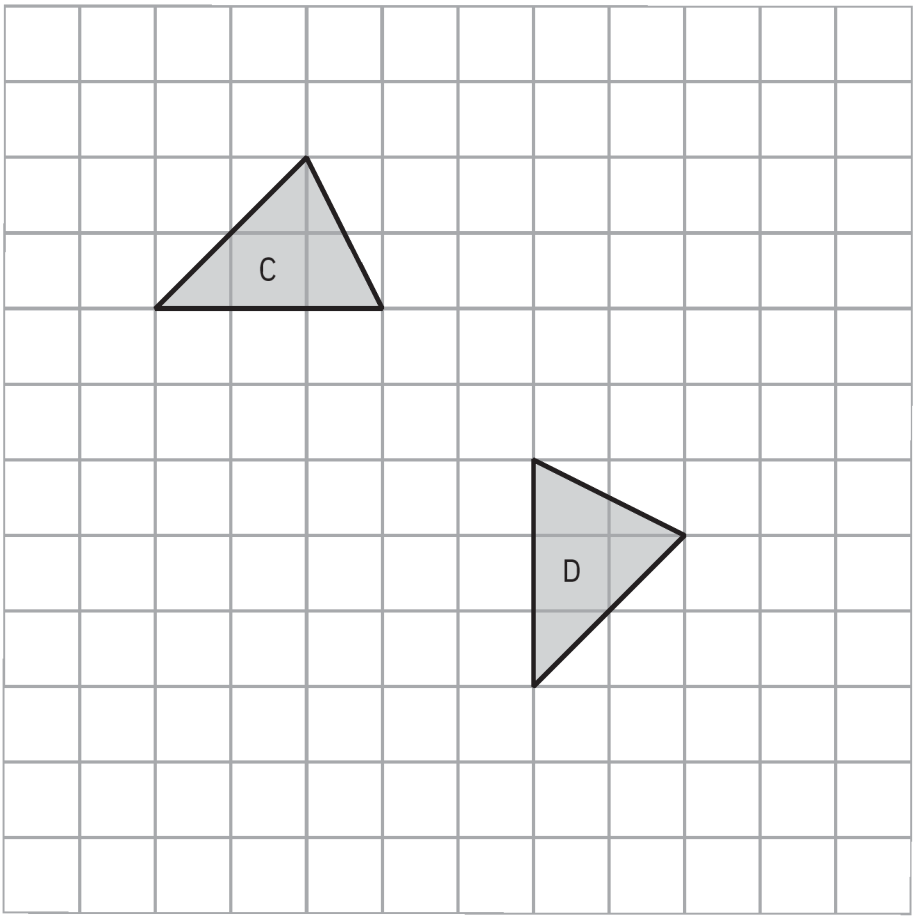
11 The table below shows the weights of the items loaded onto a cargo elevator:

Weight of item	Number of items
30 kg	3
45 kg	4
55 kg	5
65 kg	2
75 kg	3
85 kg	1

Show that the total weight of the items in the elevator is less than 1000 kg.

(Total for Question 11 is 3 marks)

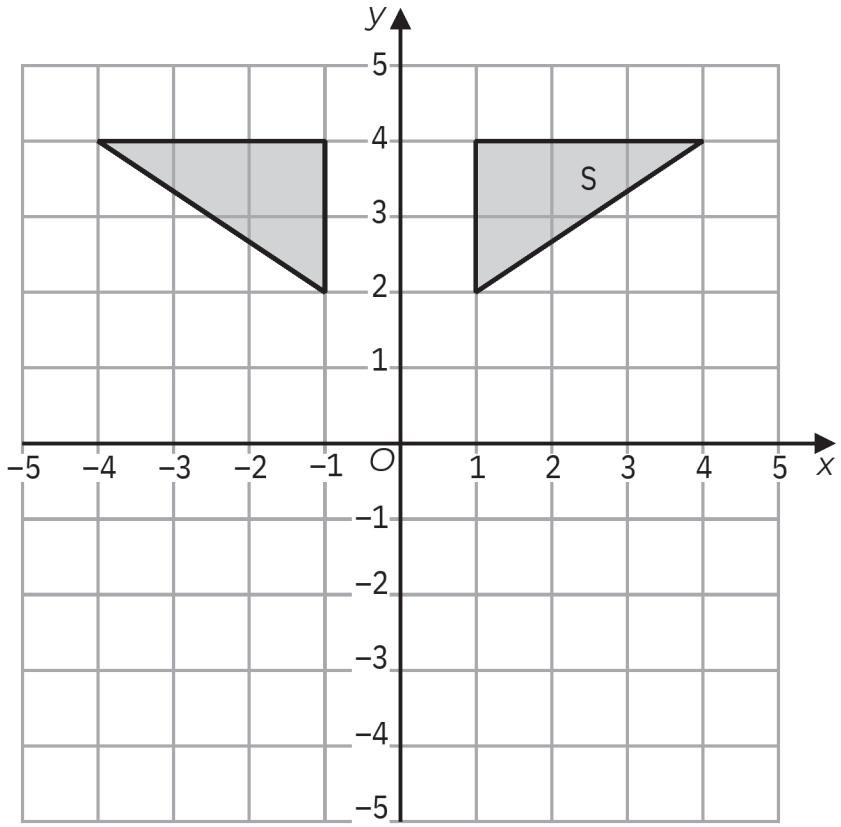
12 Shape C is reflected in a mirror line to give shape D



(a) On the grid, draw the mirror line.

(1)

(b) Ben is asked to reflect shape S in the x -axis.
Here is the diagram Ben draws.



Explain the mistake Ben has made.

.....

.....

.....

(1)

(Total for Question 12 is 2 marks)

13 There are 60 teachers in a school.

This is $\frac{1}{12}$ of the total number of people in the school.

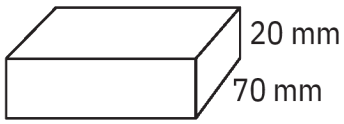
Work out the total number of people in the school.

.....

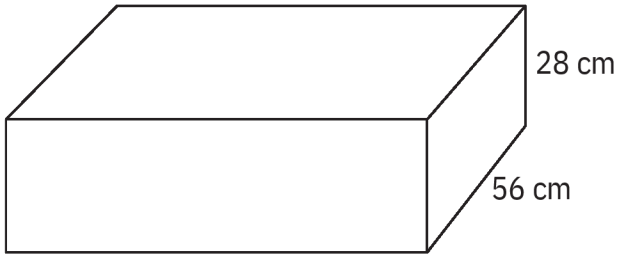
(Total for Question 13 is 2 marks)

DO NOT WRITE IN THIS AREA DO NOT WRITE IN THIS AREA

14 Packets of candies are put into boxes.



Packet



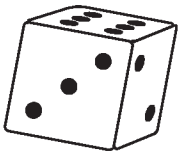
Box

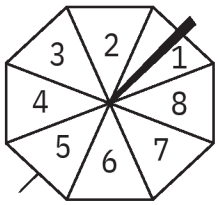
Each packet is a cuboid, 90 mm by 70 mm by 20 mm.
Each box is a cuboid, 90 cm by 56 cm by 28 cm.
Work out the greatest number of packets that can be put into each box.

.....

(Total for Question 14 is 4 marks)

15 Here is a fair ordinary dice and a fair 8-sided spinner.





Emma rolls the die once and spins the spinner once.

Is Emma more likely to get

a number greater than 4 on the die

or a number less than 5 on the spinner?

You must show all your working.

(Total for Question 15 is 3 marks)

16 Tina cycles at an average speed of 24 km/h for 2 hours 30 minutes.

Work out the distance Tina cycles.

..... km

(Total for Question 16 is 3 marks)

17 There are 3 classrooms: Maple, Oak, and Pine.

The mean number of students per classroom is 28.

There are 25 students in Maple classroom.

There are 30 students in Oak classroom.

Work out the number of students in the Pine classroom.

.....

(Total for Question 17 is 4 marks)

DO NOT WRITE IN THIS AREA DO NOT WRITE IN THIS AREA

18 Eeshu buys 300 bottles of water.

The bottles are sold in packs.

There are 15 bottles in each pack.

Each pack costs £5.

(a) Work out the total cost of the water Eeshu buys.

£.....

(3)

Samara buys a box of 30 bottles of juice for £9.

There are 500 ml of juice in each bottle.

(b) Work out the cost of 100 ml of juice.

Give your answer correct to the nearest penny.

.....p

(3)

(Total for Question 18 is 6 marks)

19 At a school, there are 300 students.

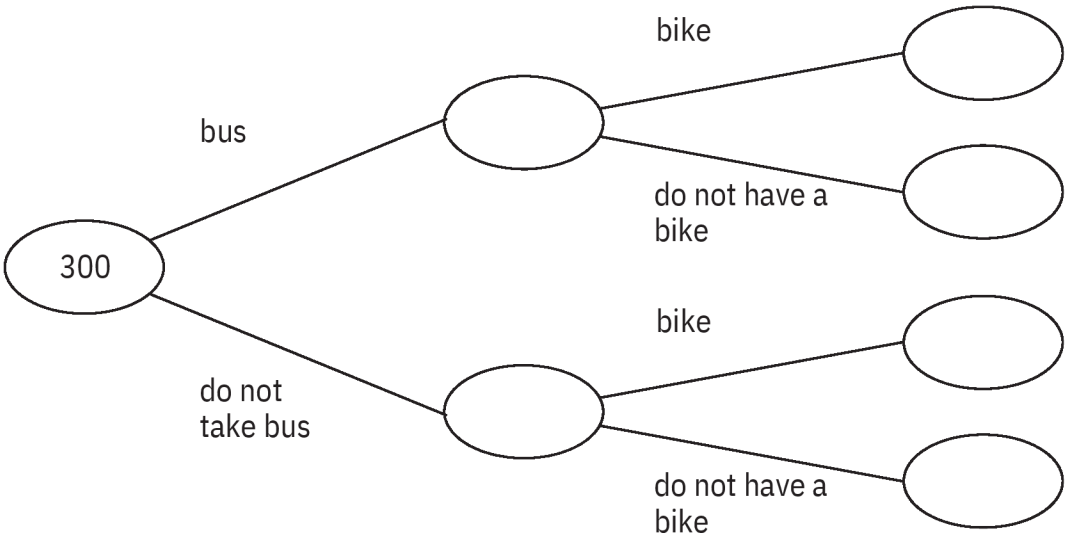
Of these students:

180 take the bus.

120 ride their bikes.

70 of the students who ride bikes do not take the bus.

(a) Use this information to complete the frequency tree.



(3)

(b) What percentage of the 100 Students who ride bikes and take the bus?

..... %

(2)

(Total for Question 19 is 5 marks)

20 (a) Work out the value of $\frac{64 - \sqrt{24.69}}{5 + (4.2)^2}$

Write down all the figures on your calculator display.

.....

(2)

(b) Work out the value of the reciprocal of 0.841

.....

(1)

(Total for Question 20 is 3 marks)

21 Write 90 as a product of its prime factors.

.....

(Total for Question 21 is 2 marks)

22 There are 72 balls in a box.

There are only orange balls and purple balls in the box.

The number of orange balls : number of purple balls = 3 : 1.

James has to work out how many purple balls are in the box.

He says, "There are 18 purple balls in the box because 1 is one-fourth of 4, and 18 is one-fourth of 72."

Is James correct?
You must give a reason for your answer.

.....

.....

.....

(Total for Question 22 is 1 mark)

DO NOT WRITE IN THIS AREA DO NOT WRITE IN THIS AREA

23 $-4 \leq n < 6$

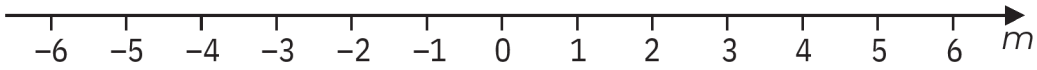
n is an integer.

(a) Write down the greatest possible value of n.

.....

(1)

(b) On the number line below, show the inequality $-5 \leq m < 1$



(2)

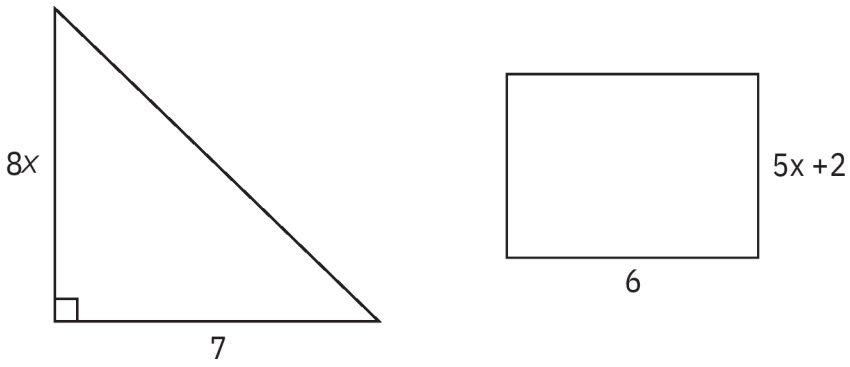
(c) Solve $\frac{2}{6}h - 5 < 5$

.....

(3)

(Total for Question 23 is 6 marks)

24 Here is a triangle and a rectangle.



All measurements are in centimetres.

The area of the triangle is 10 cm^2 greater than the area of the rectangle.
Work out the value of x.

x = ...

(Total for Question 24 is 4 marks)

25 Last year, a school recycled 1200 kg of materials.
65% of these materials were plastic and metal.
Weight of plastic recycled : weight of metal recycled = 4 : 3
Calculate the weight of metal the school recycled.

..... kg

(Total for Question 25 is 3 marks)

DO NOT WRITE IN THIS AREA DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

26 A number, d, is rounded to 1 decimal place.
The result is 15.9

Complete the error interval for d.

..... ≤ d < .....

(Total for Question 26 is 2 marks)

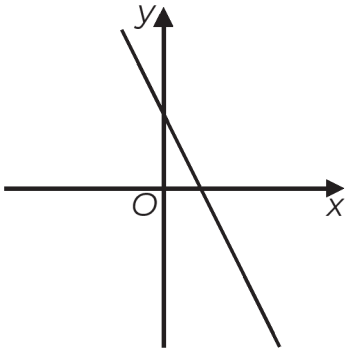
27 Charlie buys an apartment with a value of £200,000
The value of Charlie's apartment increases by 3.5% each year.

Samantha buys an apartment with a value of £210,000
The value of Samantha 's apartment increases by 2% each year.

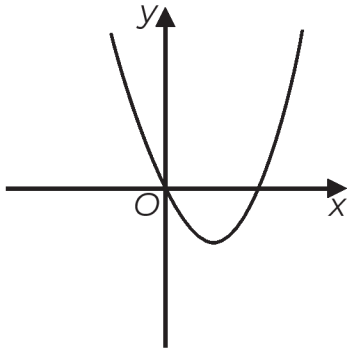
At the end of 3 years, whose apartment has the greater value?
You must show how you get your answer.

(Total for Question 27 is 4 marks)

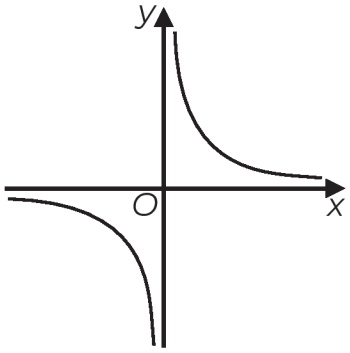
28 Here are five graphs.



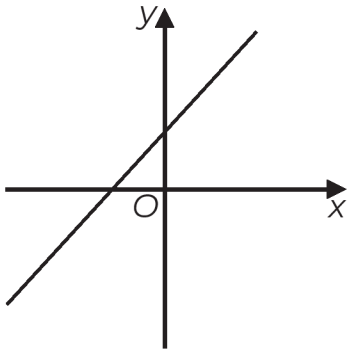
A



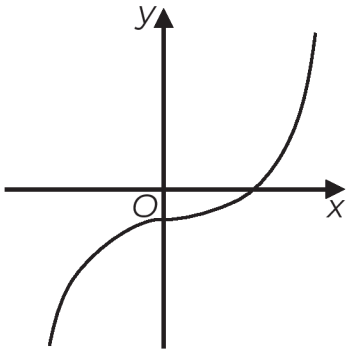
B



C



D



E

The table shows the equations of these graphs.

Equation	Graph
$y = x^2 - 4x$	
$y = x + 3$	
$y = x^3 - 2$	
$y = \frac{1}{x}$	
$y = 5 - 2x$	

Match the letter of each graph with its equation.

(Total for Question 28 is 3 marks)

TOTAL FOR PAPER IS 80 MARKS