Please check the examination details below before entering your candidate information

Candidate surname	Other names

Centre Number | Candidate Number

Edexcel Mock Test Papers-Paper2 Test1

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 the following numbers in order of size.
Start with the smallest number.

−9 6 0 -4 -3

.....

(Total for Question 1 is 1 mark)

2 Write 75% as a fraction.

.....

(Total for Question 2 is 1 mark)

3 Write down the 9th odd number.

.....

(Total for Question 3 is 1 mark)

4 Change 84 centimetres to millimetres.

..... millimetres

(Total for Question 4 is 1 mark)

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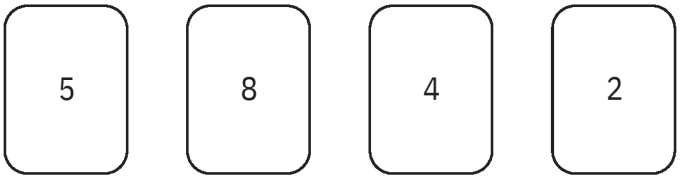
5 Here are four cards.
There is a number on each card.

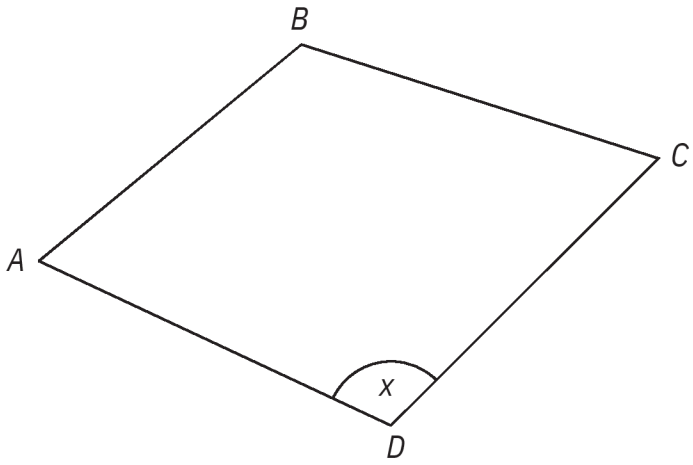


Write down the smallest 4-digit even number that can be made using each card only once.

.....

(Total for Question 5 is 1 mark)

6 Here is a quadrilateral *ABCD*.



(a) Measure the length of the side *BC*.
Give your answer in centimetres.

..... centimetres
(1)

(b) Measure the size of the angle marked *x*.

..... °
(1)

(Total for Question 6 is 2 marks)

7 Isaac writes down the distance readings from his car at the start and end of a journey.

Start of journey	1	5	3	7	9	miles
End of journey	1	8	8	7	5	miles

Isaac knows that the cost of petrol for this journey is 19p per mile.

Work out the total cost of the petrol used for this journey.
Give your answer in pounds.

£.....

(Total for Question 7 is 4 marks)

8 Rachel wants to hire a van.
She uses this rule to work out the cost of hiring a van for a number of days.

Cost = £59 × number of days

Rachel is going to hire the van for 12 days.

Work out the cost.

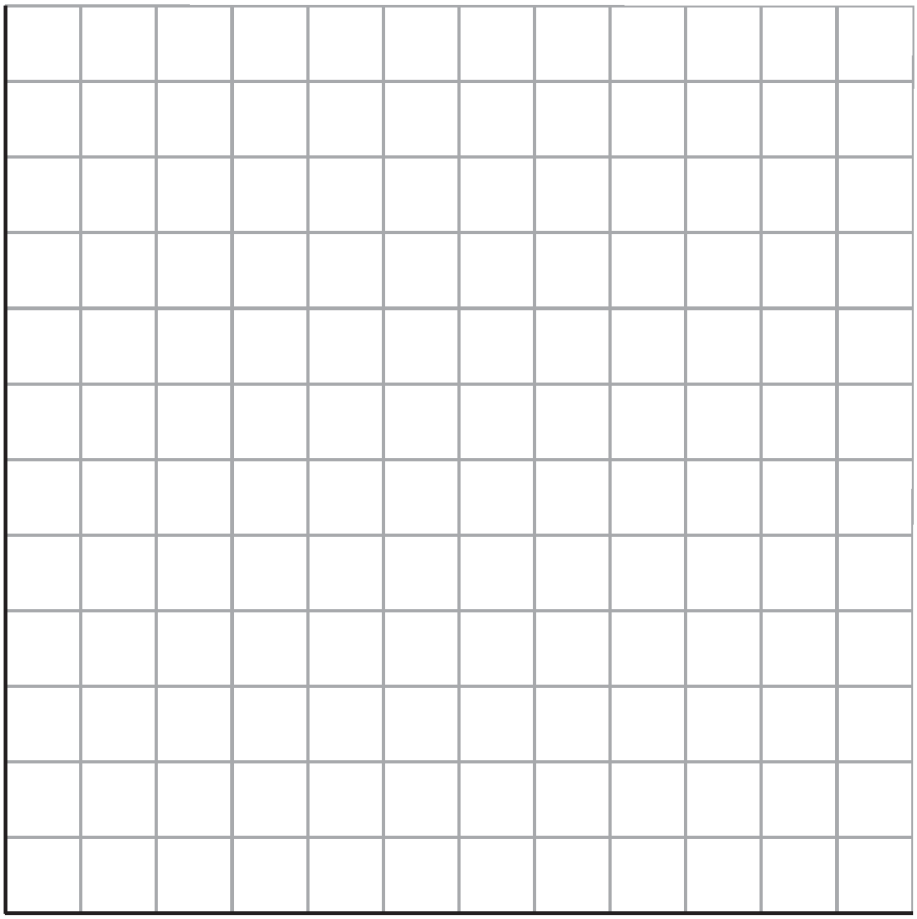
£.....

(Total for Question 8 is 2 marks)

9 The table shows information about the number of students who arrived late at school each day one week.

	Number of students
Monday	19
Tuesday	13
Wednesday	9
Thursday	5
Friday	2

On the grid, draw a bar chart for this information.



(Total for Question 9 is 3 marks)

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10 Here is part of a bus timetable between Preston and Chorley.

Preston	07 15	07 35	07 50		
Leyland	07 44	08 04	08 19		
Euxton	07 55	08 09	08 15	08 24	08 31
Hartwood	08 04	08 15	08 24	08 32	08 39
Southgate	08 09	08 29	08 36	08 43	08 53
Chorley	08 27	08 46	08 53	09 00	09 10

(a) How many minutes should the 07 15 bus take to go from Preston to Hartwood?

..... minutes
(2)

Bob goes from Leyland to Chorley by bus.

One day, Bob leaves his house at 08 00.

He takes 6 minutes to walk to the bus stop in Leyland.

He takes 12 minutes to walk from the bus stop in Chorley to work.

Bob needs to be at work for 09 15.

(b) Will Bob get to work for 09 15?

You must show how you get your answer.

(3)

(Total for Question 10 is 5 marks)

11 236 people go on a school trip.
The people on the trip are either adults or children.

There are 18 adults on the trip.

40% of the children on the trip are wearing a hat.

Find the number of children on the trip who are not wearing a hat.

.....

(Total for Question 11 is 4 marks)

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12 (a) Work out $\frac{6}{7}$ of 133

.....

(2)

(b) Write the following fractions in order of size.
Start with the smallest fraction.

$\frac{5}{12}$ $\frac{7}{24}$ $\frac{3}{8}$ $\frac{11}{36}$

.....

(2)

(Total for Question 12 is 4 marks)

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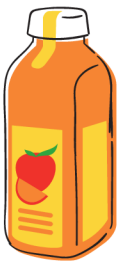
13 A shop has two different special offers on juice.



1 litre
£1.50

Pay for 2 bottles
get 1 bottle free

2 litres
£2.60

Pay for 1 bottle
get 1 bottle half price

Which offer gives the better value for money?
You must show how you get your answer.

(Total for Question 13 is 4 marks)

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14 (a) Simplify $9c + 8d + 4c - 4d$

.....

(2)

(b) Solve $5(5m + 9) = 50$

$m =$ .....

(3)

There are a apples in a basket.

There are b apples in a bag.

(c) Write an expression, in terms of a and b, for the total number of apples in 4 baskets and 3 bags.

.....

(2)

(Total for Question 14 is 7 marks)

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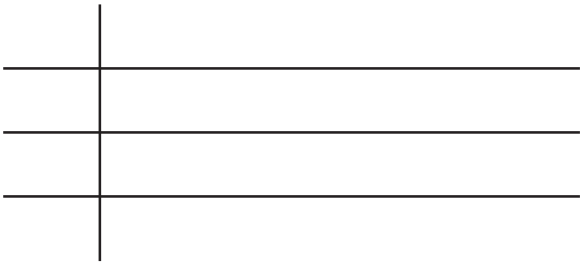
15 Alia asked her friends how many books they each have in their collection.

Here are her results.

62, 78, 54, 63, 81, 77,
85, 90, 56, 72, 64, 88,
95, 81, 74, 79, 100

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



Key:

(3)

(b) Find the median number of books.

.....

(2)

(Total for Question 15 is 5 marks)

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16 Water flows through each of the tanks that fill a pool at the same rate.

It takes 5 of the tanks 10 hours to fill the pool.

Work out how many hours it would take 8 tanks to fill $\frac{1}{3}$ of the pool.

..... hours

(Total for Question 16 is 3 marks)

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17 The table shows information about the weights of 60 students.

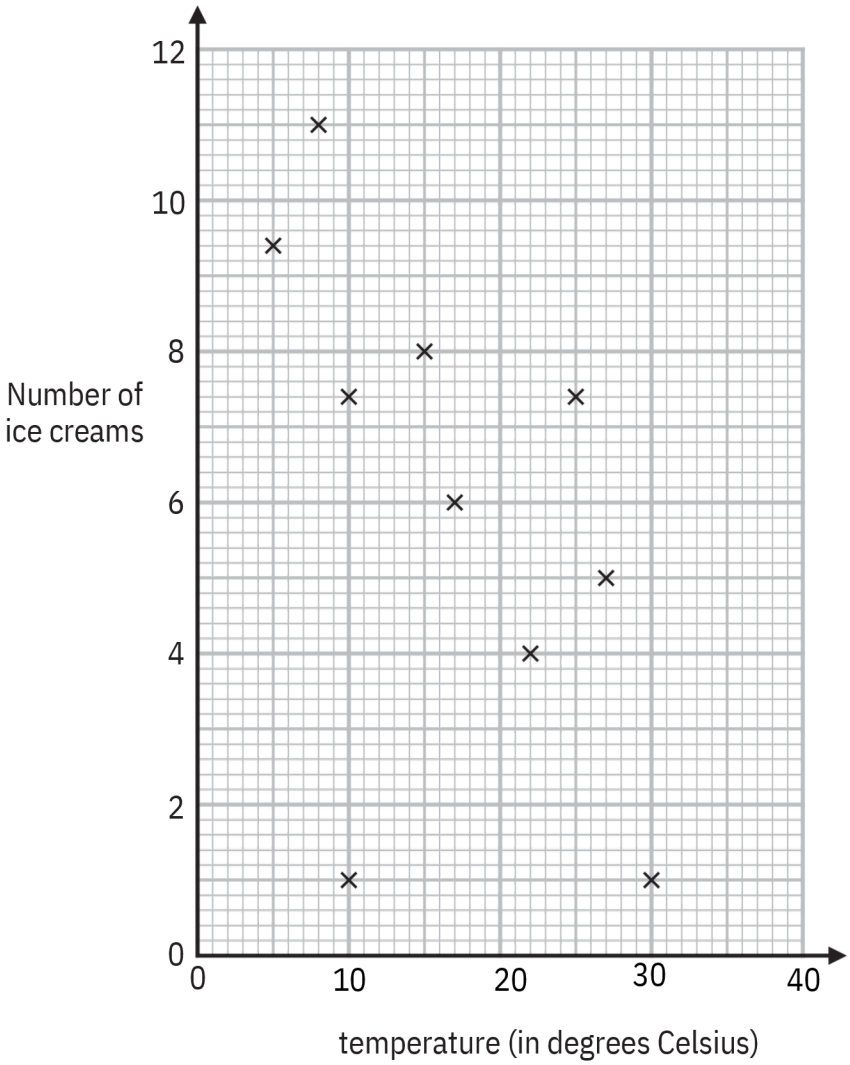
Weight (w kg)	Frequency
$40 < w \leq 50$	10
$50 < w \leq 60$	15
$60 < w \leq 70$	20
$70 < w \leq 80$	12
$80 < w \leq 90$	3

Work out an estimate for the mean weight of the students.

..... cm

(Total for Question 17 is 3 marks)

18 The scatter graph shows information about the temperature(in degrees Celsius), and the number of ice creams sold in ten English towns on the same day. One of the points is an outlier.



One of the points is an outlier.

(a) Write down the coordinates of this point.

(..... , ...)

(1)

(b) Ignoring the outlier, describe the relationship between the temperature and the number of ice creams sold.

.....

.....

.....

(1)

On the same day in another English town, the temperature was 25°C.

(c) Using the scatter graph, estimate the number of ice creams sold in this town on this day.

.....

(2)

(Total for Question 18 is 4 marks)

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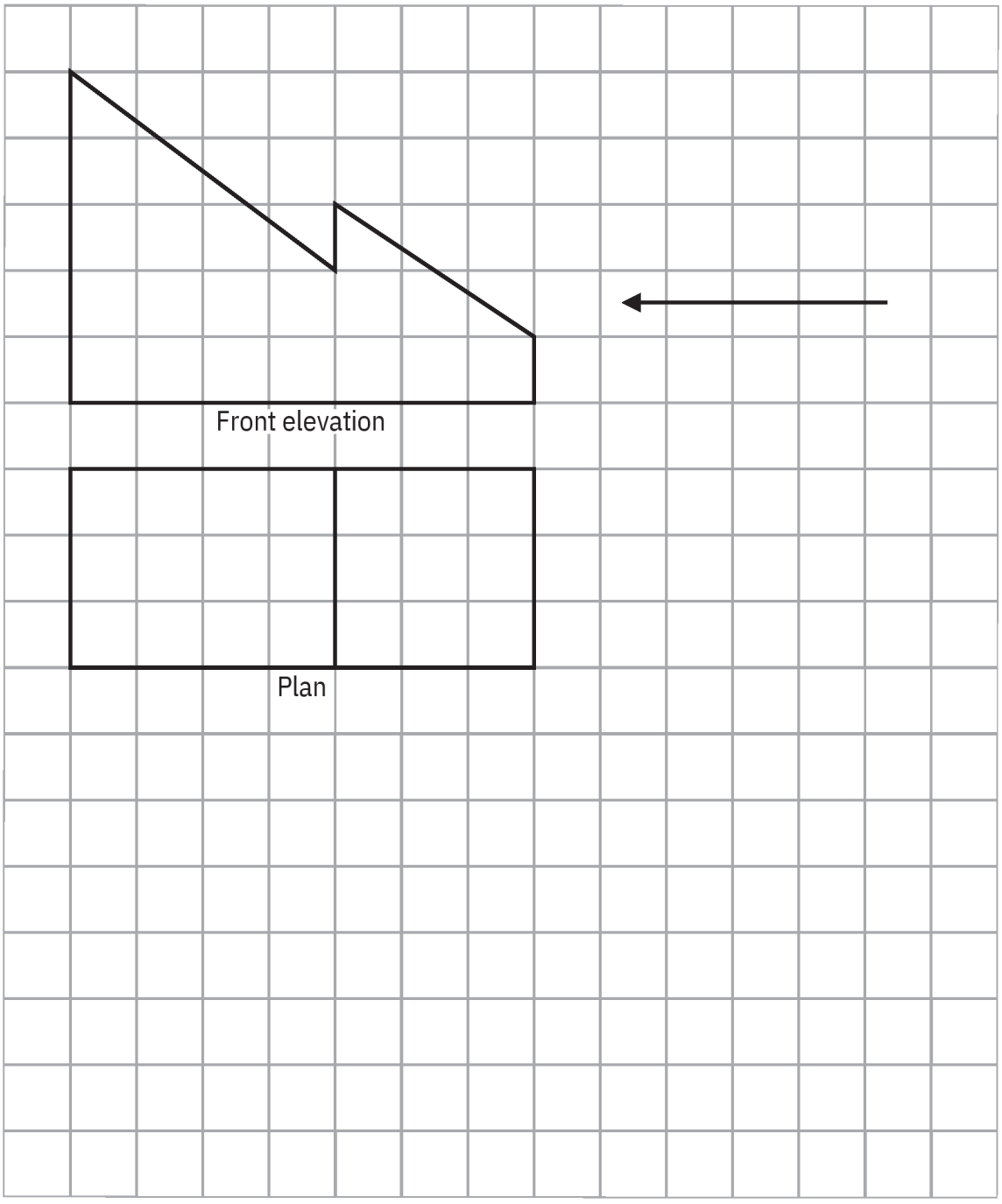
19 The front elevation and the plan of a solid are shown on the grid.

On the grid, draw the side elevation of the solid from the direction of the arrow.



(Total for Question 19 is 2 marks)

20 Here are the first five terms of an arithmetic sequence.

12 18 24 30 36

(a) Find an expression, in terms of n, for the nth term of this sequence.

.....

(2)

The nth term of a different sequence is $10 - 5n$

(b) Is -30 a term of this sequence?
You must show how you get your answer.

(2)

(Total for Question 20 is 4 marks)

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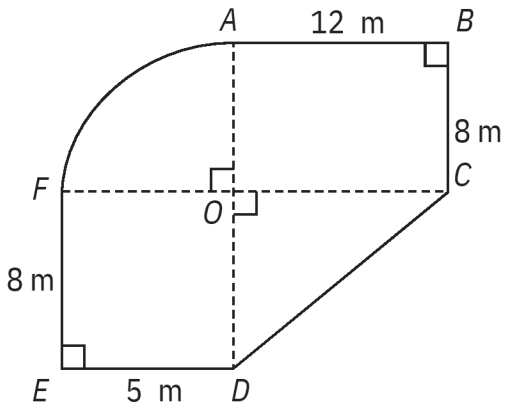
21 The diagram shows a plan of Ryan's garden.

ABCO and *DEFO* are rectangles.
CDO is a right-angled triangle.
AFO is a sector of a circle with centre *O* and angle *AOF* = 90°



Ryan is going to cover his garden with grass seed.

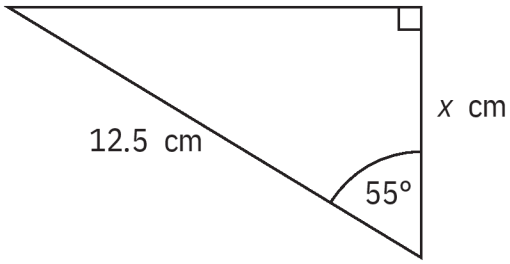
Each bag of grass seed covers 15 m2 of garden.
Each bag of grass seed costs £15.95

Work out how much it will cost Ryan to buy all the bags of grass seed he needs.

£.....

(Total for Question 21 is 5 marks)

22



Work out the value of x.
Give your answer correct to 3 significant figures.

$x =$ .....

(Total for Question 22 is 2 marks)

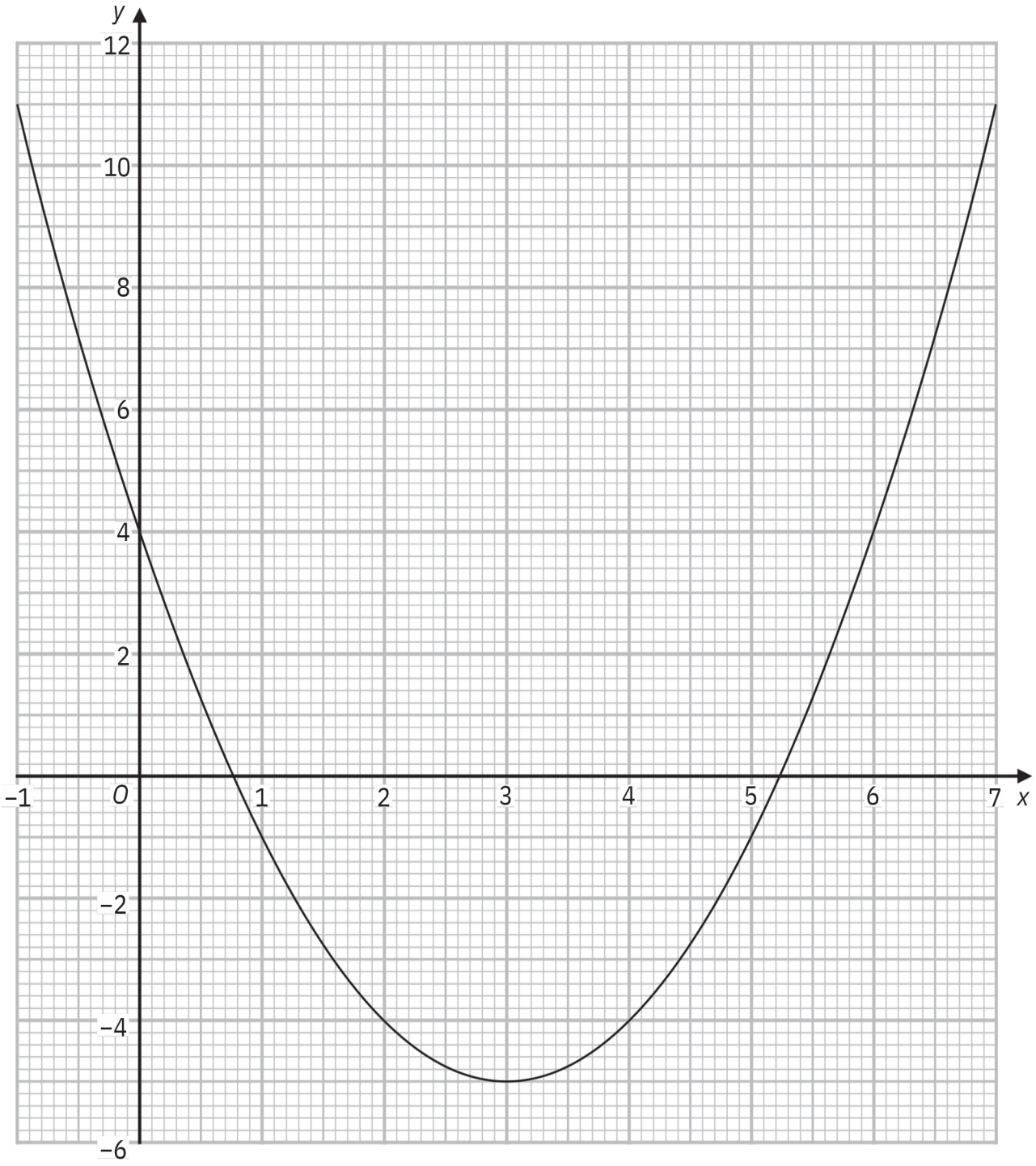
23 Mary invests £5000 for 3 years in an account paying compound interest.

In the first year, the rate of interest is 4%
In the second year, the rate of interest is 2.5%
In the third year, the rate of interest is 3%.
Work out the value of Mary's investment at the end of 3 years.

£.....

(Total for Question 23 is 3 marks)

24 Here is the graph of $y = x^2 - 6x + 3$



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(a) Write down the *y intercept of the graph of* $y = x^2 - 6x + 3$

.....

(1)

(b) Write down the coordinates of the turning point of the graph of $y = x^2 - 6x + 3$

(..... , ...)

(1)

(c) Use the graph to find estimates for the roots of $x^2 - 6x + 3 = 0$

.....

(2)

(Total for Question 24 is 4 marks)

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25 (a) Find the value of the reciprocal of 0.9

.....

(1)

x = 5800 correct to 2 significant figures.

(b) Complete the error interval for x.

..... $\square x <$ .....

(2)

(Total for Question 25 is 3 marks)

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26 The price of a car increased by 12% between 2020 and 2021.
The price of the car in 2021 was £28,000.
Calculate the price of the car in 2020.

.....

(Total for Question 26 is 2 marks)

TOTAL FOR PAPER IS 80 MARKS