PRACTICE PAPER FOR

Edexcel Paper 2F (June 2023)

------------------------------ Disclaimer ------------------------------

In 2022 I wrote a series of predicted papers that in many cases reflected the real exam paper very well. This was due to the exam boards providing advance information on the topics that were going to be in each paper. This information is no longer provided so "predicting" a paper is not possible. Nobody can know what topics and types of questions will come up in each paper, apart from the few examiners that write them.

This paper has been created based on the **most common** paper 2/3 topics from previous years and also careful analysis of what topics have already appeared in paper 1. The paper should be excellent at helping students revise for exams, however should not be relied upon as the basis for revision. The topics from this paper may well appear in the real exams, however there is absolutely no guarantee of this for the reasons previously mentioned. Some topics may appear, some may not.

Ultimately the best way to prepare for the exams is to **revise all topics**.

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Answer ALL questions

Write your answers in the spaces provided

You must write down all the stages in your working.

1 Write 0.03 as fraction

....

(Total for Question 1 is 1 mark)

2 Write 4578 correct to the nearest hundred.

....

(Total for Question 2 is 1 mark)

3 Change 7 litres into millilitres

.... ml

(Total for Question 3 is 1 mark)

4 Write $\frac{1}{5}$ as a percentage

.... %

(Total for Question 4 is 1 mark)

5 Here is a list of numbers

$$5 \qquad 6 \qquad 8 \qquad 9 \qquad 20 \qquad 24$$

   (a) From the list of numbers write down a prime number

....
(1)

   (b) From the list of numbers write down a square number

....
(1)

   (c) From the list of numbers write down a multiple of 10

....
(1)

(Total for Question 5 is 3 marks)

6 Here are the first 4 terms of a sequence.

$$13 \qquad 9 \qquad 5 \qquad 1$$

   (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 6 is 3 marks)

Turn over ▶

7 (a) Simplify $\quad 5 \times f \times g \times 3$

....
(1)

(b) Simplify $\quad k \times k \times k^2$

....
(1)

(Total for Question 7 is 2 marks)

8 A shape is drawn on grid below.
The area of each square is 1 cm^2
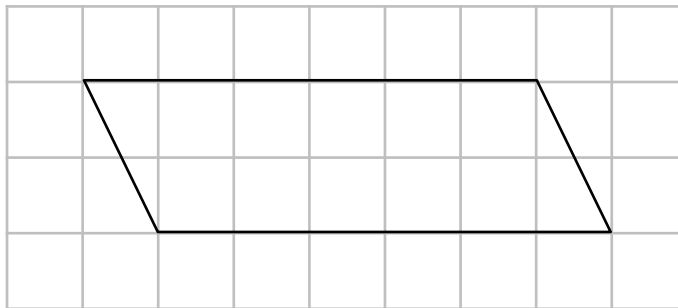
(a) Write down the name of the shape.

....
(1)

(b) Work out the area of the shape.

....cm^2
(2)

(Total for Question 8 is 3 marks)

9 Here is a triangle *ABC*.
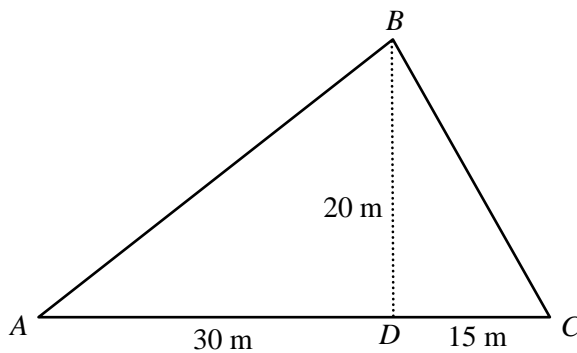
AD = 30 m
DC = 15 m
DB = 20 m
Angle ADB = 90°

(a) Work out the area of triangle *ABC*.
Give your answers in square metres.

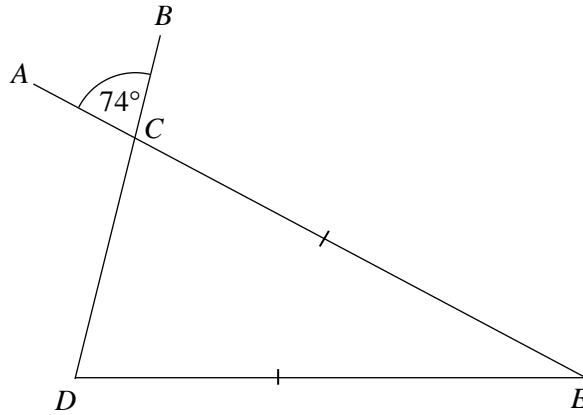... m²

(2)

(b) On the centimetre grid below, draw a scale drawing of triangle *ABC*.
Use a scale of 1 cm to 5 m.

(2)
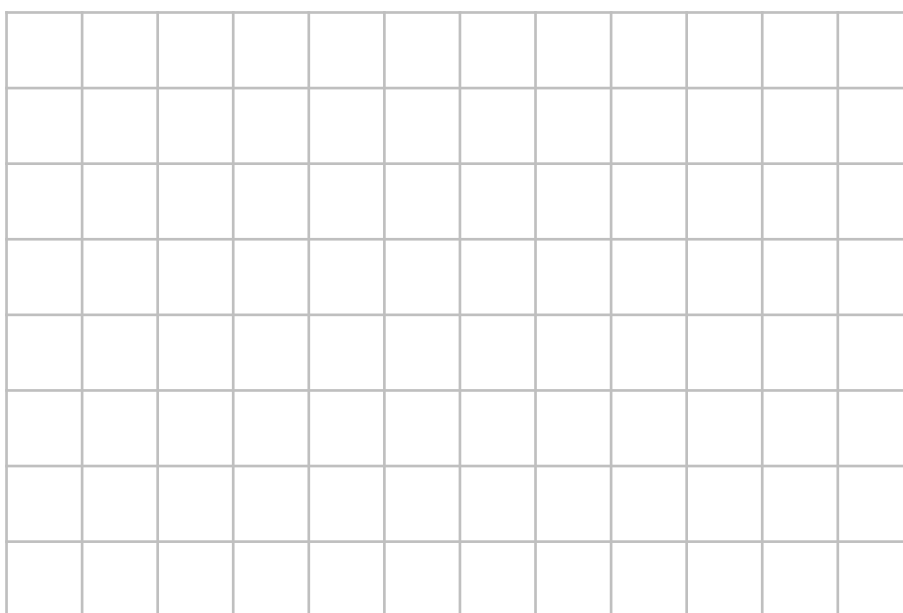
(Total for Question 9 is 4 marks)

10

Angle ACB = 74°
CE = DE

Work out the size of angle CED.
You must give a reason for each stage of your working.

°

....

(Total for Question 10 is 4 marks)

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11 The table shows the lengths of some exams.

Exam	Length
Maths	90 minutes
Geography	1 hour 20 minutes
English Paper 1	$1\frac{3}{4}$ hours
English Paper 2	$2\frac{1}{4}$ hours

(a) Work out how many minutes longer the maths exam is than the geography exam.

....

(1)

(b) Work out the ratio

Length of English Paper 1 : Length of English Paper 2

Give your answer in its simplest form.

....

(3)

Kylie receives 25% extra time for her exams.
Kylie starts her geography exam at 9:07 am
Kylie uses all of her extra time.

(c) Work out what time her geography exam will finish.

....

(3)

(Total for Question 11 is 7 marks)

7

12 A fruit shop sells apples, bananas, oranges and peaches.

Cost of an apple : Cost of a banana = 5 : 2
Cost of an orange : Cost of a peach = 4 : 5

The price of a banana is 18p

Harriet has £5.

(a) Work out the maximum number of apples that Harriet can buy.

....
(3)

John buys one orange and one peach.
The total price is 63p

(b) Work out the cost of an orange.

.... pence
(2)

(Total for Question 12 is 5 marks)

13 A cinema has 3 different popcorn sizes shown below.

Small	
40% cheaper than Medium popcorn	
95 g of popcorn	

Medium	
£4.80	
150 g of popcorn	

Large	
£6.25	
$\frac{1}{3}$ more popcorn than Medium popcorn	

Which size of popcorn represents the best value for money?
Show clearly how you got your answer.

....

(Total for Question 13 is 4 marks)

Turn over ▶

14 The table shows the numbers of adults and children visiting a theme park during one weekend.

	Adults	Children
Saturday	357	493
Sunday	330	420

(a) Write the down the fraction of those attending on **Saturday** that were adults.
Give you answer in its simplest form.

....
(2)

(b) Taylor says:

"On Saturday the proportion of visitors that were adults is higher than it was on Sunday"

Show that Taylor is wrong.
(2)

The ticket price for an adult is £35
The ticket price for a child is 15% less than it is for an adult.

(c) Work out the amount of money the theme park will receive from ticket sales over this weekend.

£ ....
(3)

(Total for Question 14 is 7 marks)

15 The table shows information about the masses of 50 sheep.

Mass (m kg)	Frequency
$0 < m \leq 20$	6
$20 < m \leq 40$	15
$40 < m \leq 60$	25
$60 < m \leq 80$	4

Work out an estimate for the mean mass of the sheep.

.... kg

(Total for Question 15 is 3 marks)

16 Solve $18x - 5 = 2x + 7$

....

(Total for Question 16 is 3 marks)

11

17 In a bag there are only red, blue and green counters.
A counter is going to be taken from the bag.

The table shows the probability of taking a red counter.

Colour	Red	Blue	Green
Probability	0.46		

The probability of selecting a blue counter is twice as much as the probability of selecting a green.

(a) Complete the table. **(2)**

There are 350 counters in the bag.

(b) Work out the number of red counters.

....
(2)
(Total for Question 17 is 4 marks)

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18 Expand and simplify $(x-3)(x-6)$

....

(Total for Question 18 is 2 marks)

19 (a) Write 7.2×10^{-4} as an ordinary number.

....

(1)

(b) Write 620400 in standard form.

....

(1)

(c) Work out $\dfrac{8.4 \times 10^5}{2.5 \times 10^6 \times 3.5 \times 10^{-8}}$

Give your answer in standard form.

....

(2)

(Total for Question 19 is 4 marks)

13

20 (a) Complete the table of values for $y = x^2 + 2x - 5$

x	-4	-3	-2	-1	0	1	2
y							

(2)

(b) On the grid, draw the graph of $y = x^2 + 2x - 5$ for values of x from -4 to 2

(2)
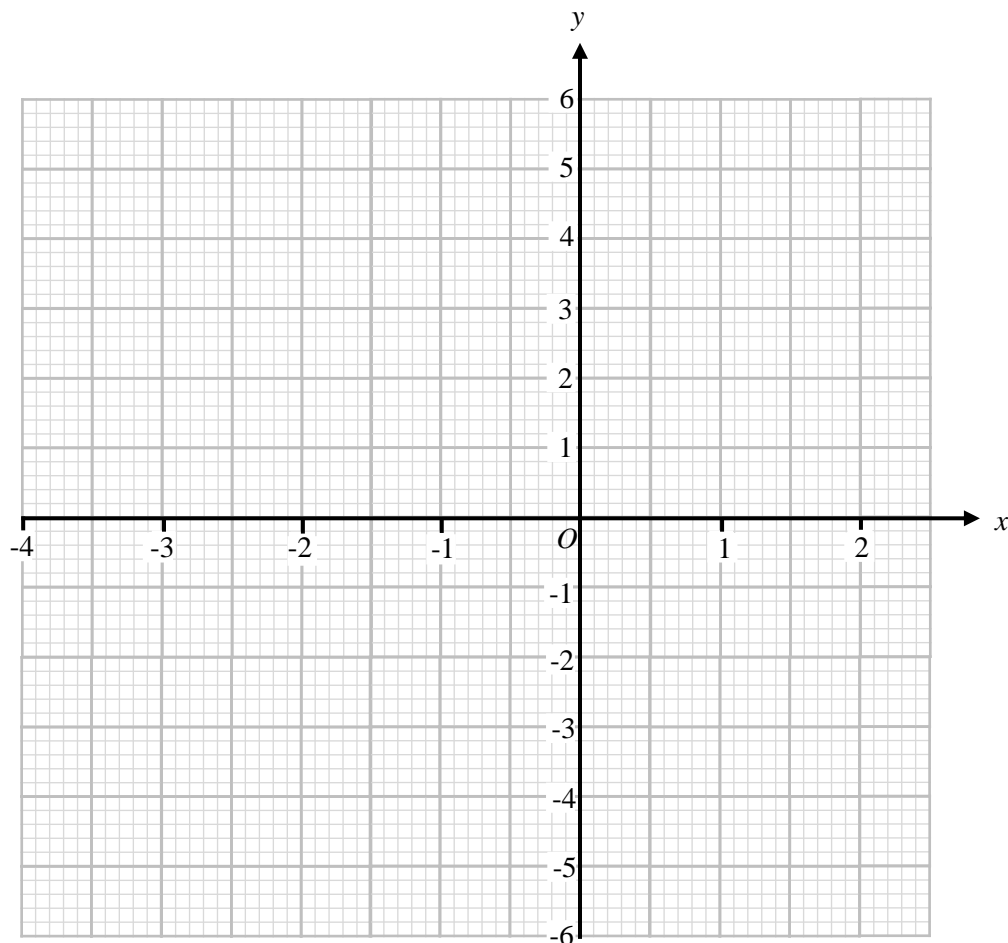
(c) Use your graph to find estimates of the solutions of the equation $x^2 + 2x - 5 = 1$

....

(2)

(Total for Question 20 is 6 marks)

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21
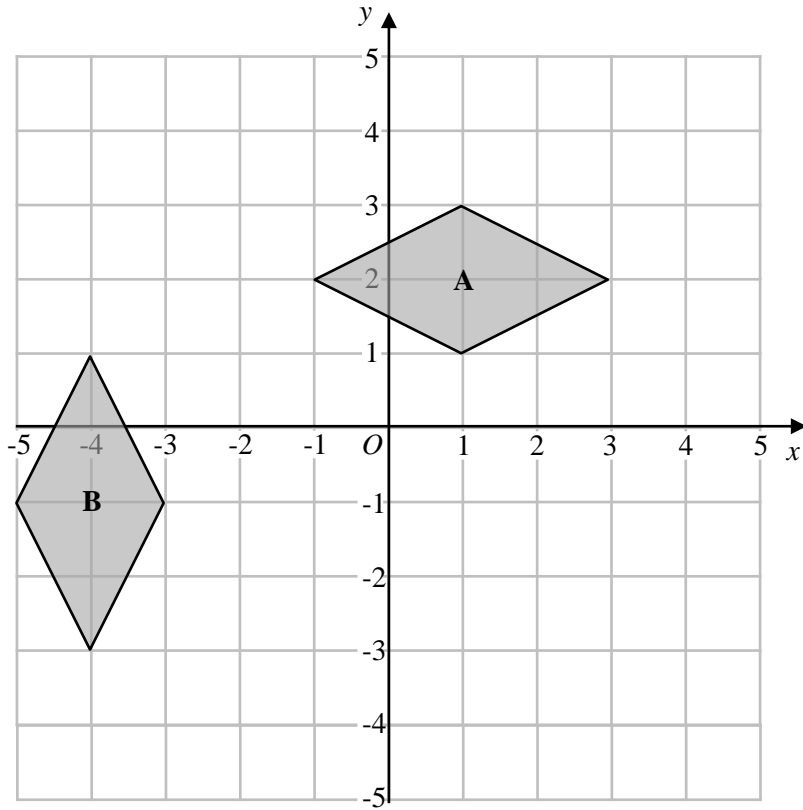
(a) Describe fully the single transformation that maps rhombus **A** onto rhombus **B**

....

....

(b) Enlarge rhombus **A** by a scale factor 2 and centre of enlargement (1,2)
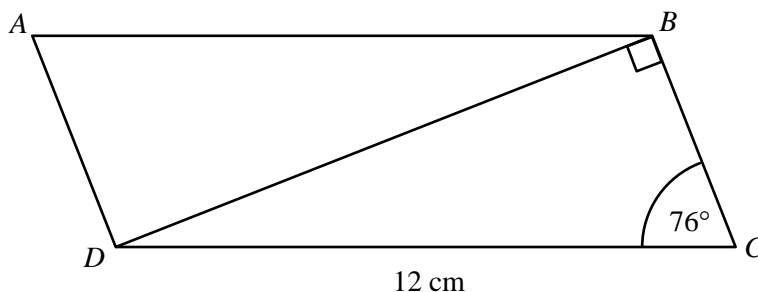
(2)

(Total for Question 21 is 4 marks)

15

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Turn over ▶

22 The mass of a phone is 140 grams, correct to the nearest gram.

Complete the error interval for the mass of the phone.

.... g ≤ mass < .... g

(Total for Question 22 is 2 marks)

23

ABCD is a parallelogram
Angle *BCD* = 76°
DC = 12 cm

Work out the perimeter of the parallelogram *ABCD*.
Give your answer correct to 1 decimal place.

.... cm

(Total for Question 23 is 4 marks)

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24 Make *m* the subject of the formula $mx + 4 = k$

....

(Total for Question 24 is 2 marks)

TOTAL FOR PAPER IS 80 MARKS