Write your name and class in the boxes below before you start.

Candidate surname	Other names

Class	Teacher	Date

DNEP Education

GCSE Resit · Predicted Paper 1F · November 2026

Time: **90 minutes**

Paper reference

DNEP/AQA1FN26

Mathematics

PREDICTED PAPER 1 — NOVEMBER 2026

Foundation Tier · AQA GCSE Mathematics (8300) style

Questions written for DNEP Education in the style of AQA GCSE Mathematics (8300) papers.

You must have: Ruler graduated in centimetres and millimetres, protractor, pair of compasses, pen, HB pencil, eraser. You must NOT use a calculator. Tracing paper may be used.

Total Marks

/ 80

Topics in this paper

Topic (lesson)	Questions	Marks
Number	1, 4, 9, 14, 19, 23, 24	17
Geometry and measures	2, 12, 15, 16, 25, 26	15
Fractions, decimals and percentages	3, 10, 17	9
Algebra	5, 13, 22, 27	12
Money and ratio	6, 11, 28	10
Probability	7, 21	9
Statistics	8, 18	5
Graphs	20	3
		Total 80

Instructions

- Use black ink or ball-point pen. Draw diagrams in pencil.
- Fill in the boxes at the top of this page with your name, class, teacher and the date.
- Answer all 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 must not be used.

Information

- The total mark for this paper is 80.
- The marks for each question are shown in brackets — use this as a guide to how much time to spend on each question.
- When you have finished, mark your answers with your teacher and complete the RAG feedback page at the back.
- This is a predicted paper. No-one can know what will be on the real paper, so revise the whole course, not just these topics.

Advice

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

1 **(a)** Work out $\sqrt{81}$

Answer .....

[1 mark]

(b) Work out 4^3

Answer .....

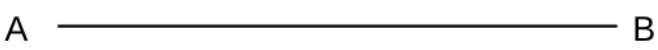
[1 mark]

(c) Work out 3.7×1000

Answer .....

[1 mark]

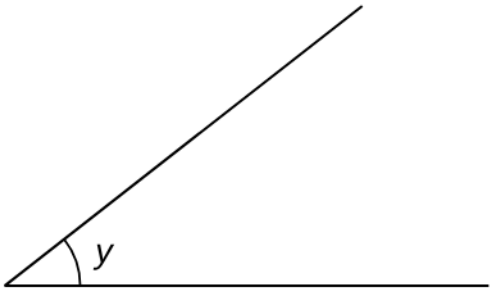
2 **(a)** Measure the length of the line AB.



Answer ..... cm

[1 mark]

(b) Measure the size of angle *y*.



Answer ..... degrees

[1 mark]

3 Write these numbers in order of size.
Start with the smallest.

0.6 $\frac{5}{8}$ 61% 0.065

Answer .....

[2 marks]

DO NOT WRITE IN THIS AREA

4 **(a)** Write down all the factors of 36.

Answer .....

[2 marks]

(b) Kai says, "All prime numbers are odd."
Write down a number that shows Kai is wrong.

Answer .....

[1 mark]

5 **(a)** Simplify $5a + 3b - 2a + b$

Answer .....

[1 mark]

(b) Expand $4(2x - 3)$

Answer .....

[1 mark]

(c) Factorise fully $6y + 15$

Answer .....

[1 mark]

(d) Simplify $m \times m \times m$

Answer .....

[1 mark]

6 At a café, one coffee and three muffins cost £7.40 altogether.
One muffin costs £1.60

Ali buys two coffees and two muffins.
He pays with a £10 note.

How much change should he get?

Answer £ .....

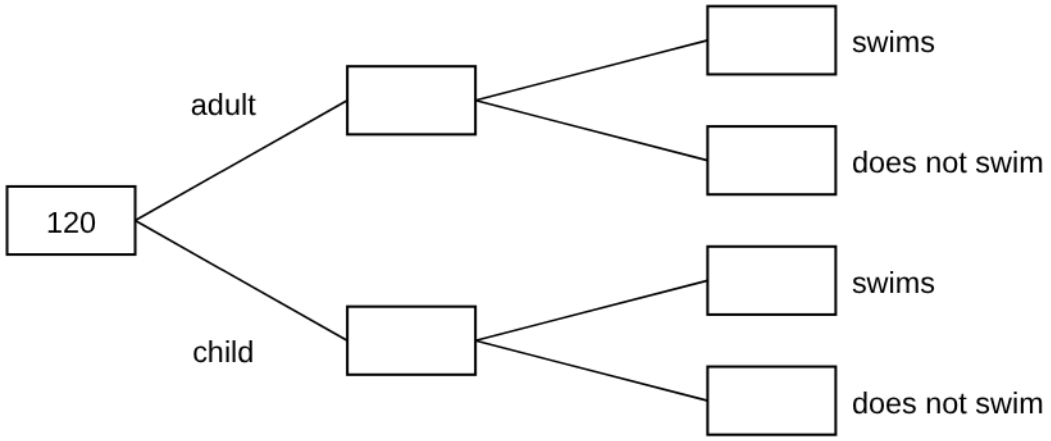
[4 marks]

DO NOT WRITE IN THIS AREA

7 120 people are members of a gym.

70 of the members are adults. The rest are children.
45 of the adults swim.
$\frac{1}{5}$ of the children swim.

(a) Complete the frequency tree.



[3 marks]

(b) What fraction of all the members swim?
Give your answer in its simplest form.

Answer .....

[1 mark]

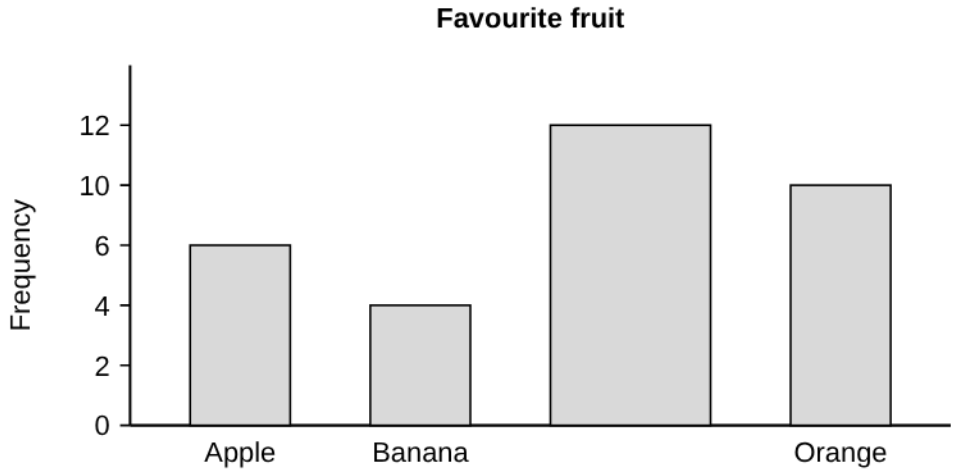
(c) One of the members who swims is chosen at random.
Work out the probability that this member is a child.

Answer .....

[2 marks]

DO NOT WRITE IN THIS AREA

8 Zara asks some people to name their favourite fruit.
She draws this bar chart.



Write down **two** mistakes in her bar chart.

Mistake 1 ……

……

Mistake 2 ……

……

[2 marks]

9 You are given that $34 \times 26 = 884$

(a) Work out 3.4×26

Answer ……

[1 mark]

(b) Work out $\frac{884}{2.6}$

Answer ……

[1 mark]

DO NOT WRITE IN THIS AREA

10 The same coat is sold in two shops.

Shop A	Shop B
Coat £85 12% off	Coat £80 $\frac{1}{10}$ off

Which shop sells the coat for less, and by how much?
You must show your working.

Answer Shop .....

by £ .....

[4 marks]

11 A bag has only red counters and blue counters.
The ratio of red counters to blue counters is 3 : 5
There are 64 counters in the bag.

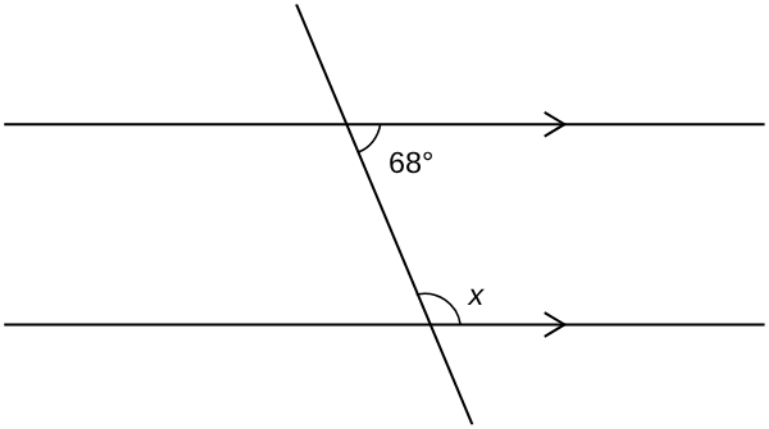
How many more blue counters than red counters are there?

Answer .....

[3 marks]

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12 The diagram shows two parallel lines crossed by a straight line.



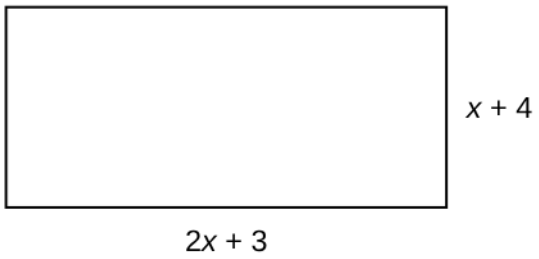
Not drawn accurately

Work out the size of angle x.
Give a reason for each stage of your working.

Answer ..... degrees

[3 marks]

13 The diagram shows a rectangle.



The perimeter of the rectangle is 38 cm.

Work out the length of the longer side of the rectangle.

Answer ..... cm

[4 marks]

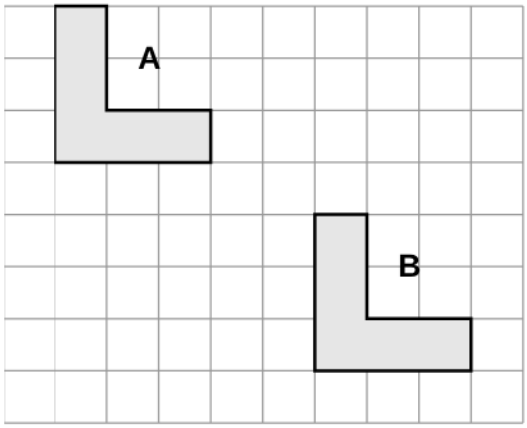
DO NOT WRITE IN THIS AREA

14 Tick **one** box for each statement.

Statement	Always true	Sometimes true	Never true
The sum of two odd numbers is even.	☐	☐	☐
A multiple of 6 is a multiple of 4.	☐	☐	☐
When n is a whole number, n^2 is negative.	☐	☐	☐
When n is a whole number, $2n + 1$ is a prime number.	☐	☐	☐

[2 marks]

15 Describe fully the single transformation that maps shape A onto shape B.

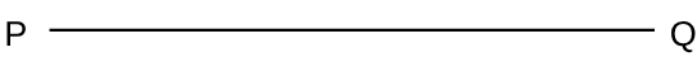


……

……

[2 marks]

16 Use ruler and compasses to construct the perpendicular bisector of the line PQ.
You must show your construction arcs.



[2 marks]

DO NOT WRITE IN THIS AREA

17 Work out $2\frac{2}{3} \div 1\frac{1}{9}$

Give your answer as a mixed number in its simplest form.

Answer .....

[3 marks]

18 Here are five numbers.

3 7 7 9 14

Each number is increased by 2.

What happens to the mean, the median and the range?
Tick **one** box in each row.

	Increases	Decreases	Stays the same
Mean	☐	☐	☐
Median	☐	☐	☐
Range	☐	☐	☐

[3 marks]

DO NOT WRITE IN THIS AREA

19 **(a)** Write 90 as a product of its prime factors.
Give your answer in index form.

Answer .....

[2 marks]

(b) $24 = 2^3 \times 3$
Work out the lowest common multiple (LCM) of 90 and 24.

Answer .....

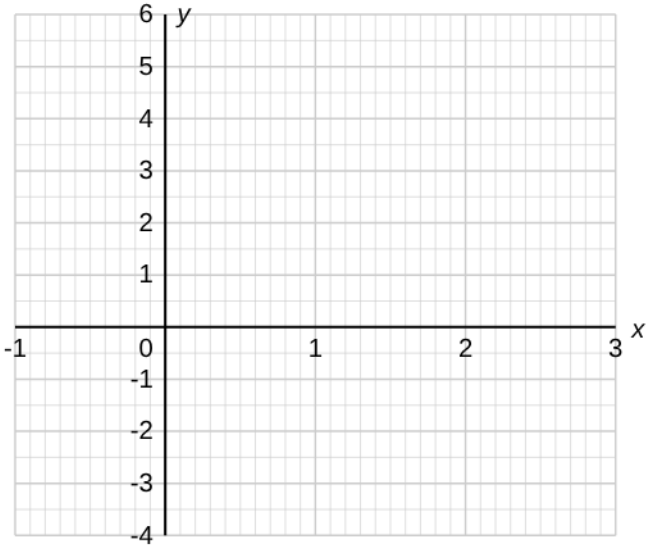
[1 mark]

20 **(a)** Complete the table of values for $y = 2x - 1$

x	-1	0	1	2	3
y		−1			5

[1 mark]

(b) On the grid, draw the graph of $y = 2x - 1$ for values of x from −1 to 3

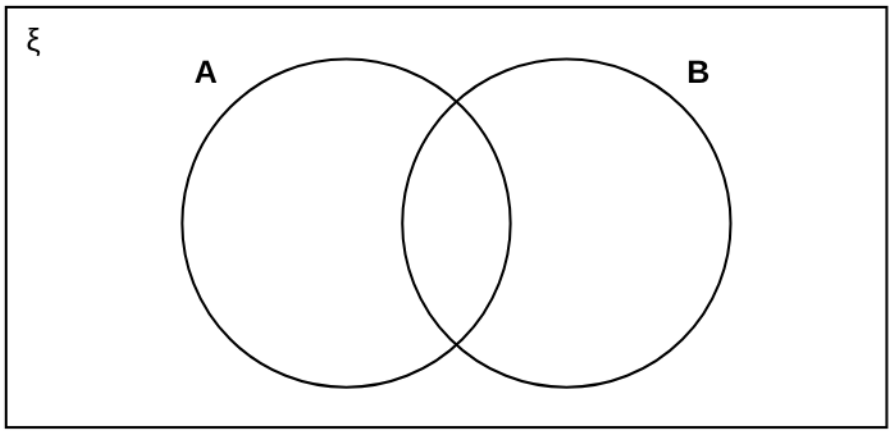


[2 marks]

DO NOT WRITE IN THIS AREA

21 ξ = {whole numbers from 1 to 12}
A = {multiples of 3}
B = {factors of 12}

(a) Complete the Venn diagram.



[2 marks]

(b) A number is chosen at random from ξ.
Work out the probability that the number is in A ∩ B.

Answer .....

[1 mark]

22 Each term of a sequence is found by adding the two terms before it.
The first two terms are 5 and −8

Work out the 6th term of the sequence.

Answer .....

[2 marks]

23 **(a)** Write $7^5 \times 7^3$ as a single power of 7

Answer .....

[1 mark]

(b) Simplify $(x^4)^3$

Answer .....

[1 mark]

DO NOT WRITE IN THIS AREA

24 Work out $(4 \times 10^5) \times (6 \times 10^3)$

Give your answer in standard form.

Answer .....

[2 marks]

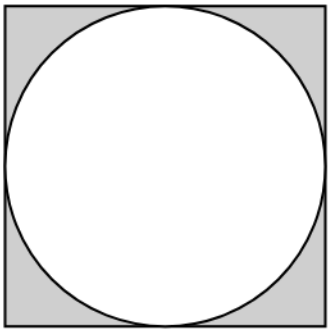
25 Circle the value of $\cos 60°$

0 $\frac{1}{2}$ $\frac{\sqrt{3}}{2}$ 1

[1 mark]

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26 **(a)** The diagram shows a circle inside a square of side 10 cm.
The circle touches all four sides of the square.



10 cm

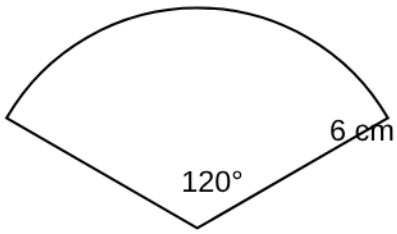
Not drawn accurately

Work out the shaded area.
Give your answer in terms of π.

Answer ..... cm^2

[2 marks]

(b) The diagram shows a sector of a circle of radius 6 cm.



Not drawn accurately

Work out the perimeter of the sector.
Give your answer in terms of π.

Answer ..... cm

[3 marks]

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27 **(a)** Factorise $x^2 + 2x - 15$

Answer .....

[1 mark]

(b) Hence, solve $x^2 + 2x - 15 = 0$

Answer .....

[1 mark]

28 6 builders take 10 days to build a wall.

(a) How many days would it take 4 builders to build the same wall?

Answer ..... days

[2 marks]

(b) Write down one assumption you made in part (a).

.....

[1 mark]

TOTAL FOR PAPER IS 80 MARKS

Now mark your paper and complete the RAG feedback page overleaf.

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

Your results and next steps (RAG feedback)

Mark your paper with the mark scheme. Write your mark for each question, then colour one circle: GREEN = full marks · AMBER = some marks · RED = no marks. Use the topic table to decide which lessons to revisit.

Q	Topic (lesson)	Calc?	Marks	My mark	R A G
1	Number	No	3		
2	Geometry and measures	No	2		
3	Fractions, decimals and percentages	No	2		
4	Number	No	3		
5	Algebra	No	4		
6	Money and ratio	No	4		
7	Probability	No	6		
8	Statistics	No	2		
9	Number	No	2		
10	Fractions, decimals and percentages	No	4		
11	Money and ratio	No	3		
12	Geometry and measures	No	3		
13	Algebra	No	4		
14	Number	No	2		
15	Geometry and measures	No	2		
16	Geometry and measures	No	2		
17	Fractions, decimals and percentages	No	3		
18	Statistics	No	3		
19	Number	No	3		
20	Graphs	No	3		
21	Probability	No	3		
22	Algebra	No	2		
23	Number	No	2		
24	Number	No	2		
25	Geometry and measures	No	1		
26	Geometry and measures	No	5		
27	Algebra	No	2		
28	Money and ratio	No	3		
			Total 80		= _____ %

Your results and next steps (continued)

By topic

Topic (lesson)	Questions	My marks	R	A	G
Number	1, 4, 9, 14, 19, 23, 24	____ / 17	○	○	○
Geometry and measures	2, 12, 15, 16, 25, 26	____ / 15	○	○	○
Fractions, decimals and percentages	3, 10, 17	____ / 9	○	○	○
Algebra	5, 13, 22, 27	____ / 12	○	○	○
Money and ratio	6, 11, 28	____ / 10	○	○	○
Probability	7, 21	____ / 9	○	○	○
Statistics	8, 18	____ / 5	○	○	○
Graphs	20	____ / 3	○	○	○

What went well (my GREEN topics)

Even better if (my RED / AMBER topics)

Lessons I will revisit (lesson numbers) and how:

Teacher comment

Signed: _____

How likely is each topic on November Paper 1?

Based on the 7 November AQA 8300 Foundation Paper 1s we analysed (Nov17–Nov24). Chance = how many of those November papers tested the topic. The real paper can test anything on the specification, so use this to decide what to revise first, not what to leave out. The November 2025 paper is not included.

Very likely (75%+) Likely (50%+) Possible (25%+) Unlikely (under 25%)

Topic	Nov papers	Chance	Last Nov	This paper
Simplify, expand, factorise, substitute	7 of 7	100%	Nov24	Q5
Written × and ÷ (including decimals)	7 of 7	100%	Nov24	Q9
Percentages	7 of 7	100%	Nov24	Q10
Charts and tables (bar, pictogram, pie…)	7 of 7	100%	Nov24	Q8
Add and subtract fractions, mixed numbers	6 of 7	86%	Nov24	—
Coordinates and straight-line graphs	6 of 7	86%	Nov24	Q20
Probability	6 of 7	86%	Nov24	Q7, Q21
Ratio	6 of 7	86%	Nov24	Q11
Money and best-buy problems	5 of 7	71%	Nov24	Q6
Negatives, BIDMAS, powers and roots	5 of 7	71%	Nov24	Q1
Circles and π	5 of 7	71%	Nov24	Q26
Pythagoras and trigonometry	5 of 7	71%	Nov24	Q25
Multiply/divide fractions, fraction of amount	4 of 7	57%	Nov23	Q17
Perimeter, area, volume	4 of 7	57%	Nov24	Q13
Quadratics	4 of 7	57%	Nov23	Q27
Linear equations, function machines	4 of 7	57%	Nov24	Q13
Averages and range	4 of 7	57%	Nov24	Q18
FDP, place value and ordering	4 of 7	57%	Nov24	Q3
Standard form	4 of 7	57%	Nov23	Q24
Units, time, scale drawings, bearings	4 of 7	57%	Nov24	—
Transformations	4 of 7	57%	Nov24	Q15
Angles, parallel lines, polygons ★	3 of 7	43%	Nov19	Q12
Constructions and loci	3 of 7	43%	Nov24	Q16
Measuring, shapes, nets, plans	3 of 7	43%	Nov24	Q2
Proportion, recipes, inverse proportion	3 of 7	43%	Nov24	Q28
Rounding, estimation, error intervals ★	3 of 7	43%	Nov22	—
Index laws ★	3 of 7	43%	Nov23	Q23
Inequalities	3 of 7	43%	Nov22	—
Factors, multiples, primes, squares, cubes	3 of 7	43%	Nov24	Q4, Q14
Sequences and nth term	3 of 7	43%	Nov24	Q22
Speed, density, pressure	3 of 7	43%	Nov24	—
Venn diagrams ★	2 of 7	29%	Nov22	Q21
Prime factors, HCF and LCM ★	1 of 7	14%	Nov21	Q19
Scatter graphs	1 of 7	14%	Nov23	—
Vectors ★	1 of 7	14%	Nov22	—
Frequency trees and tree diagrams	1 of 7	14%	Nov24	Q7
Reverse percentages	1 of 7	14%	Nov23	—
Similarity & congruence	1 of 7	14%	Nov24	—
Compound interest and depreciation	0 of 7	0%	—	—
Simultaneous equations	0 of 7	0%	—	—

★ = not on recent November papers, so it may be due. — in the last column = not in this paper: revise it separately.