

Print copy of braille text (UEB)

WJEC GCSE

3300U10-1

Mathematics

Unit 1: Non-Calculator

Foundation Tier

Thursday, 15 May 2025 – Morning

1 hour 30 minutes **plus your additional time allowance**

ADDITIONAL MATERIALS

You must have: Tactile ruler and protractor, pair of compasses and drawing equipment e.g. geometry board, rubber mat, mapping pins, rubber bands, drawing stylus and spur wheel.

ITEMS INCLUDED WITH QUESTION PAPER

- **A separate Formula List.**
- **A separate Diagram Booklet.**
- **Bumpons for Question 6 (a), Question 6 (b) and Question 13.**

INSTRUCTIONS TO CANDIDATES

- **On your paper**, write your name, centre number and candidate number.
- Answer ALL the questions **on your paper**.
- The use of a calculator is NOT permitted in this examination.
- Take π as 3.14

INFORMATION FOR CANDIDATES

You should give details of your method of solution when appropriate.

Unless stated, diagrams are not drawn to scale.

Scale drawing solutions will not be acceptable where you are asked to calculate.

The number of marks is given in brackets at the end of each question or part-question.

In question 8, the assessment will take into account the quality of your linguistic and mathematical organisation, communication and accuracy in writing.

1. (a) Write twenty thousand, three hundred and six in figures.

Ans: ____ [1 mark]

(b) Write $\frac{3}{10}$ as a percentage.

Ans: ____% [1 mark]

(c) Subtract 435 from 826

Ans: ____ [1 mark]

(d) Write 8467.2 correct to the nearest hundred.

Ans: ____ [1 mark]

(e) Estimate the value of 9.8×31.2

Ans: ____ [1 mark]

2. On the diagram provided for Question 2 in the separate Diagram Booklet, draw an angle of 135° at point P.
A spare tactile diagram and drawing film are available for this question.
[1 mark]

3. Look at the diagram for Question 3 in the separate Diagram Booklet.
Which numbers represent the letters P, Q, R and S to make the calculation in each row and each column correct?

Ans: P ____ Q ____ R ____ S ____ [3 marks]

4. (a) How many centimetres are there in 4.58 m?

Choose the correct answer from the following list.

U = 45.8 cm

V = 0.458 cm

W = 46 cm

X = 458 cm

Y = 4580 cm

Ans: ____ [1 mark]

(b) Write 3729 grams in kilograms.

Ans: ____ [1 mark]

5. (a) What is the mode of the nine numbers below?

3 8 9 3 7 2 7 9 3

Ans: Mode = ____ [1 mark]

(b) What is the median of the seven numbers below?

8 3 4 9 2 8 1

Ans: Median = ____ [2 marks]

(c) Work out the mean of the four numbers below.

3 12 10 7

Ans: Mean = ____ [2 marks]

6. (a) Look at the diagram for Question 6 (a) in the separate Diagram Booklet.

Shade 40% of this shape.

A spare tactile diagram, bumpons and drawing film are available for this question. [1 mark]

(b) Look at the diagram for Question 6 (b) in the separate Diagram Booklet.

Shade $\frac{3}{8}$ of this shape.

A spare tactile diagram, bumpons and drawing film are available for this question. [1 mark]

7. Eight card numbers are shown below.

3 6 7 8 9 11 16 25

Jo has FOUR of these cards in her hand.

Dafydd chooses ONE of Jo's FOUR cards at random.

- There is AN EVEN CHANCE that the number on the card is a square number.
- It is UNLIKELY that the number on the card is a factor of 21

Which four cards COULD Jo have in her hand?

Write the numbers **of** the four cards below.

Ans: ____ ____ ____ ____ [3 marks]

8. IN THIS QUESTION, YOU WILL BE ASSESSED ON THE QUALITY OF YOUR ORGANISATION, COMMUNICATION AND ACCURACY IN WRITING.

Look at the diagram for Question 8 in the separate Diagram Booklet.
The diagram is NOT drawn to scale.

A rectangle and a semicircle are joined to make the shape **shown in the diagram**.

The height of the rectangle is 10 cm.
The area of the rectangle is 400 cm^2

Calculate the radius of the semicircle.
You must show all your working.

Ans: ____ [3 marks + 2 marks OCW]

9. Look at the diagram for Question 9 in the separate Diagram Booklet.
The diagram shows a Venn diagram.

Place the five numbers 6, 8, 12, 25 and 27 in the Venn diagram.

Ans: (i) ____ (ii) ____ (iii) ____ (iv) ____ (v) ____ [2 marks]

10. Solve the equation $7 + p = 45$

Ans: ____ [1 mark]

11. Look at the diagram for Question 11 in the separate Diagram Booklet.
The diagram is NOT drawn to scale.

The diagram shows the angles $2x^\circ$, $4x^\circ$ and $3x^\circ$

Calculate the value of x .

You must show all your working.

Ans: $x =$ ____ [3 marks]

12. (a) Calculate $7^2 \times 2^3$

Ans: ____ [2 marks]

(b) Write down the next two numbers in the following sequence.

18, 16, 12, 6, ____, ____

Ans: ____, ____ [1 mark]

13. Look at the diagram for Question 13 in the separate Diagram Booklet.
The diagram shows some shaded squares on a grid.

Shade the least number of squares so that the grid **shown** has rotational symmetry of order 4

A spare tactile diagram and bumpons are provided for this question.
[2 marks]

14. Write 0.62, 68% and $\frac{13}{20}$ in ascending order.

You must show all your working.

Ans: Smallest value ____ Greatest value [3 marks]

15. Look at the diagram for Question 15 in the separate Diagram Booklet.
The diagram is NOT drawn to scale.

In the diagram:

- EG is a straight line
- FGH is an isosceles triangle
- Angle FGH = 50°
- Angle EFH = x°

Calculate the value of x.

Ans: ____ [3 marks]

16. Mari and Ranvir each think of a number.
Here are some clues to find their numbers.

Mari's number

A whole number less than 20

A multiple of 6

Ranvir's number

Half of Ranvir's number is $\sqrt{25}$

The product of their numbers is between 100 and 150

Find Mari's number and Ranvir's number, and calculate the product of their numbers.

You must show all your working.

Ans: Mari's number is ____

Ans: Ranvir's number is ____

Ans: The product of Mari and Ranvir's numbers is ____

[5 marks]

17. There are 200 pupils in a school hall.
The pupils are from Year 7 to Year 11

One of the pupils is chosen at random.

(a) Complete the table below.

	Probability
Year 7	0.2
Year 8	0.3
Year 9	0.26
Year 10	0.14
Year 11	(i)

Ans: (i) ____ [2 marks]

(b) How many of the pupils are in Year 10?

Ans: ____ [2 marks]

18. Solve $12y - 3 = 7y + 15$

Ans: ____ [3 marks]

19. Look at the diagram for Question 19 in the separate Diagram Booklet.
The diagram is NOT drawn to scale.

The diagram shows a trapezium, ABCD.

The area of the right-angled triangle, AED, is 24 cm^2

The length of AB is 3 cm.

The length of DE is 4 cm.

The length of EC is 10 cm.

AE is perpendicular.

Calculate the area of the trapezium, ABCD.

You must show all your working.

Ans: ____ [5 marks]

20. Geraint cycles 18 miles in 1 hour 30 minutes.
Calculate Geraint's average speed.
Give your answer in miles per hour.

Ans: ____ [3 marks]

21. Look at the diagram for Question 21 in the separate Diagram Booklet.
The diagram is NOT drawn to scale.

In the diagram:

PR is parallel to ST

Angle PQT = 65°

Angle TQU = 60°

Angle RQU = 55°

Angle QTU = x

Angle VUQ = y

(a) Find the size of angle x .

Ans: ____ [1 mark]

(b) Find the size of angle y .

Choose your answer from the following list:

55° 115° 120° 125° 135°

Ans: ____ [1 mark]

TOTAL 65 MARKS

END OF PAPER
