



National 5 Maths 2026 Paper 1 Practice Paper

Pro Pass Masterclass

National 5
Maths



TOPIC: Clelland Maths 2026 National 5 Maths Paper 1 Practice Paper

Paper 1 (Non-Calculator)

Duration — 1 hour

Total marks — 40

Attempt ALL questions.
You may NOT use a calculator.

To earn full marks you must show your working in your answers.
State the units for your answer where appropriate.
Write your answers clearly in the spaces provided.

1. Evaluate

$$\frac{3}{4} \left(2\frac{1}{3} - \frac{5}{6} \right)$$

2

Give your answer in its simplest form.

2. Expand and simplify

$$(2x - 3)(x^2 + 4x - 5)$$

3

3. A straight line passes through the points $P(-3, 5)$ and $Q(1, -7)$.
Find the equation of the line PQ. Give your answer in its simplest form.

3



National 5 Maths 2026 Paper 1 Practice Paper

Pro Pass Masterclass

National 5
Maths



TOPIC: Clelland Maths 2026 National 5 Maths Paper 1 Practice Paper

4. Expand and simplify

$$\sqrt{2}(3\sqrt{2} - \sqrt{6})$$

3

5. A function is defined as $f(x) = x^2 - 4x$.
Evaluate $f(-3)$.

2



National 5 Maths 2026 Paper 1 Practice Paper

Pro Pass Masterclass

National 5
Maths



TOPIC: Clelland Maths 2026 National 5 Maths Paper 1 Practice Paper

6. A cinema sells adult and child tickets.

(a) One evening, 3 adult tickets and 4 child tickets were sold for a total of £45. **1**

Write down an equation to illustrate this information.

(b) The following evening, 2 adult tickets and 3 child tickets were sold for a total of £32. **1**

Write down an equation to illustrate this information.

(c) Calculate the cost of one adult ticket and the cost of one child ticket. **3**

7. The vector $\mathbf{u}$ is given by $\mathbf{u} = \begin{pmatrix} -2 \\ 3 \\ -6 \end{pmatrix}$. **2**

Calculate the magnitude of vector $\mathbf{u}$, $|\mathbf{u}|$.

8. Given that $\cos 60^\circ = \frac{1}{2}$, solve the equation

$$2 \cos x^\circ + 1 = 0 \quad \mathbf{3}$$

for $0 \leq x \leq 360$.



National 5 Maths 2026 Paper 1 Practice Paper

Pro Pass Masterclass

National 5
Maths



TOPIC: Clelland Maths 2026 National 5 Maths Paper 1 Practice Paper

9. Evaluate

$$16^{-\frac{3}{4}}$$

2



National 5 Maths 2026 Paper 1 Practice Paper

Pro Pass Masterclass

National 5
Maths



TOPIC: Clelland Maths 2026 National 5 Maths Paper 1 Practice Paper

10. The equation of a parabola is $y = (x + 4)^2 - 7$.

(a) State the coordinates of the turning point of the parabola.

1

(b) State the equation of the axis of symmetry.

1

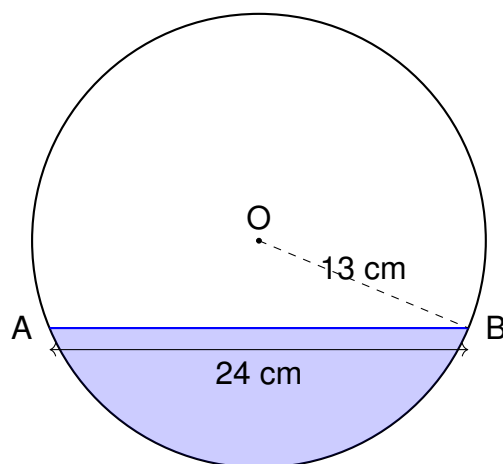
(c) State the coordinates of the point where the graph crosses the y -axis.

1

11. A cylindrical pipe is used to transport water.

The cross-section of the pipe is a circle, centre O , with a radius of 13 centimetres.

The surface of the water is a horizontal chord, AB , of length 24 centimetres.



4

Calculate the depth of the water in the pipe.



National 5 Maths 2026 Paper 1 Practice Paper

Pro Pass Masterclass

National 5
Maths



TOPIC: Clelland Maths 2026 National 5 Maths Paper 1 Practice Paper

12. Express

$$\frac{4}{x+5} - \frac{3}{x-1}, \quad x \neq -5, x \neq 1$$

3

as a single fraction in its simplest form.



National 5 Maths 2026 Paper 1 Practice Paper

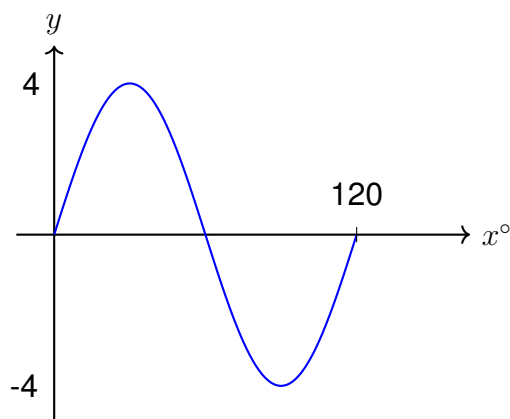
Pro Pass Masterclass

National 5
Maths



TOPIC: Clelland Maths 2026 National 5 Maths Paper 1 Practice Paper

13. The diagram shows part of the graph of $y = a \sin(bx^\circ)$.

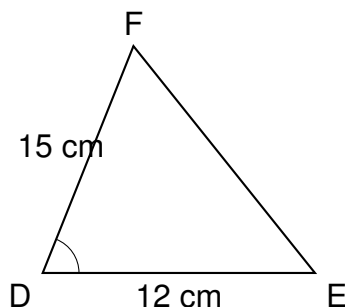


2

State the values of a and b .

14. In triangle DEF:

- $DE = 12 \text{ cm}$
- $DF = 15 \text{ cm}$
- $\sin D = \frac{2}{3}$



3

Calculate the exact area of triangle DEF.

[END OF QUESTION PAPER 1]



National 5 Maths 2026 Paper 1 Practice Paper

Pro Pass Masterclass

National 5
Maths



TOPIC: Clelland Maths 2026 National 5 Maths Paper 1 Practice Paper

Paper 1 (Answers)

1. $\frac{9}{8}$ or $1\frac{1}{8}$
2. $2x^3 + 5x^2 - 22x + 15$
3. $y = -3x - 4$ (or $3x + y + 4 = 0$)
4. $6 - 2\sqrt{3}$
5. 21
6. (a) $3a + 4c = 45$
(b) $2a + 3c = 32$
(c) Adult ticket = £7, Child ticket = £6
7. 7
8. $x = 120, 240$
9. $\frac{1}{8}$
10. (a) $(-4, -7)$
(b) $x = -4$
(c) $(0, 9)$
11. 8 cm
12. $\frac{x - 19}{(x + 5)(x - 1)}$
13. $a = 4, b = 3$
14. 60 cm^2

Want deeper walkthroughs?
Scan the QR or click for full video solutions.

 [Watch Video Solutions](#)