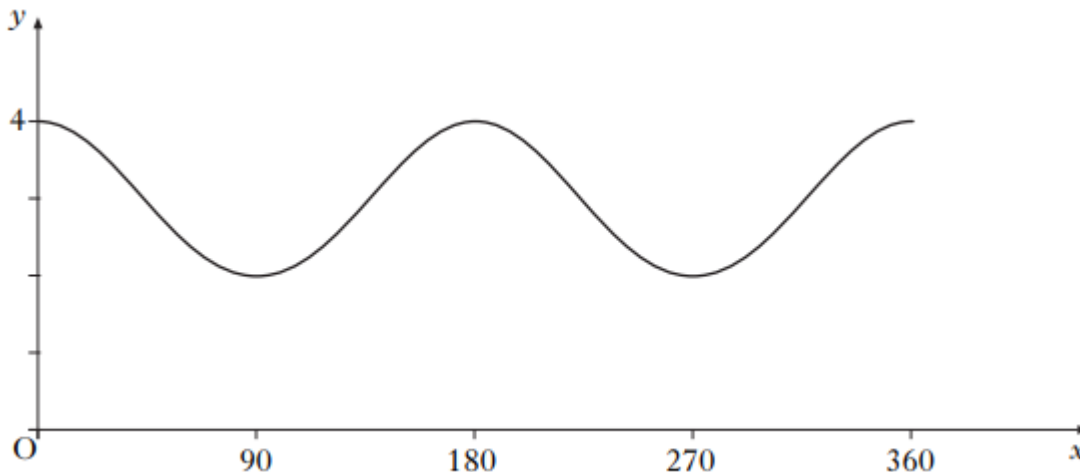


C1	Non-Calculator Paper	
1	Evaluate $1\frac{2}{5} \times \frac{3}{14}$	2
2	Multiply out the brackets and collect like terms $(x - 3)(5x^2 - 2x + 1)$	3
3	Solve the inequality $3 - (x + 1) > 11$	2
4	(a) Factorise fully $3x^2 + 9x - 12$	2
	(b) Hence solve $3x^2 + 9x - 12 = 0$	2
5	A parabola has equation $y = (x - 2)^2 - 5$ For this parabola, state: (i) The equation of the axis of symmetry (ii) The coordinates of the turning point (iii) The nature of the turning point	1 2 1
6	Express $\frac{4}{x} + \frac{2}{x + 1}$, $x \neq 0, x \neq -1$ As a single fraction in its simplest form	3
7	Part of the graph of $y = \cos bx + c$ is shown below  Write down the values of b and c	2

8	<p>(a) Simplify $\sqrt{2} \times \sqrt{18}$</p> <p>(b) Simplify $\sqrt{2} + \sqrt{18}$</p> <p>(c) Hence show that $\frac{\sqrt{2} \times \sqrt{18}}{\sqrt{2} + \sqrt{18}} = \frac{3\sqrt{2}}{4}$</p>	<p>1</p> <p>1</p> <p>2</p>
9	<p>A straight line is represented by the equation $x + 3y = 12$</p> <p>(a) Find the gradient of this line</p> <p>(b) Find the point where the line crosses the x-axis</p>	<p>2</p> <p>2</p>
10	<p>Simplify</p> $\frac{\cos^3 x}{1 - \sin^2 x}$	<p>2</p>
30 marks		