

1.2 Functions & Graphs

At the end of this outcome I should...	I can do	Revised	
1.2.1 know domain, range, inverse, composite functions	<input type="checkbox"/>	<input type="checkbox"/>	1
1.2.2 know meaning of the terms amplitude and period	<input type="checkbox"/>	<input type="checkbox"/>	3
1.2.3 know the general features of graphs of $f:x \rightarrow \sin(ax + b)$ and $f:x \rightarrow \cos(ax + b)$	<input type="checkbox"/>	<input type="checkbox"/>	
1.2.4 given graph of $f(x)$ draw graphs of related functions, $f(x)$ being a simple polynomial or trigonometric function	<input type="checkbox"/>	<input type="checkbox"/>	
			$y = 3f(x) + 2, f(3x + 2), 3f(x + \frac{\pi}{2})$
1.2.5 know general features of the graphs of: $f(x) = a^x$ ($a > 1$ and $0 < a < 1$), $x \in \mathbf{R}$ $f(x) = \log_a x$ ($a > 1, x > 0$)	<input type="checkbox"/>	<input type="checkbox"/>	2
1.2.6 find $f(g(x))$ given $f(x)$ and $g(x)$	<input type="checkbox"/>	<input type="checkbox"/>	1
1.2.7 recognise probable form of function from its graph	<input type="checkbox"/>	<input type="checkbox"/>	
1.2.8 complete the square for: $x^2 + px + q$	<input type="checkbox"/>	<input type="checkbox"/>	2
			complete the square for: $ax^2 + bx + c$, e.g. $2x^2 - x - 1$
1.2.9 interpret formulae and equations	<input type="checkbox"/>	<input type="checkbox"/>	
			$y = (1 - \sin x)^2 + 2$ has minimum value of 2 when $x = \frac{\pi}{2}$
			$y = -2 - 3(2x - 1)^2$ has maximum value of -2 when $x = \frac{1}{2}$
1.2.10 know that π radians = 180°	<input type="checkbox"/>	<input type="checkbox"/>	3
1.2.11 know exact values of sin/cos $0, \frac{\pi}{6}, \frac{\pi}{4}, \frac{\pi}{3}, \frac{\pi}{2}$ radians	<input type="checkbox"/>	<input type="checkbox"/>	3
			and tan $0, \frac{\pi}{6}, \frac{\pi}{4}, \frac{\pi}{3}$ radians.

N.B. **Bold** type indicates Level A/B content.

1, 2, or 3 refers to specific chapter, no reference - covered across all three chapters.