

Scheme of Learning: Year 11 Higher Autumn Term

Topic Sequence: Graphs

1	2	3	4
Gradients and Lines	Non-Linear Graphs	Using Graphs	Graph Transformations

Topic Overview: Non-Linear Graphs

Students extend their learning of transformations of shapes to sketch and recognise translations and reflections of the graph of a given function, including the trigonometric graphs

Learning Sequence:

Translations of Graphs

Students explore translations and make generalisations of graphs of the functions $f(x) + a$, $f(x + b)$ where a and b are integers. Translations horizontally and vertically are considered separately. Trigonometric graphs are also used in this step

Reflections of Graphs

Students transform the graph of reflections of functions $-f(x)$ and $f(-x)$. Students recognise these transformations of functions and are able to write down the function of a transformation given the original function. Trigonometric graphs are also used in this step.

Sequence of Learning:		Topic Resources:	
1	Translations of graphs	Knowledge Map:	Graph transformatoins
		Assessment:	
2	Reflections of graphs	Knowledge:	End of Topic test
		Application of Knowledge:	Termly summative assessment
		Supportive Reading:	
		Any supported reading listed here	Sparx Maths www.sparxmaths.co.uk
			Corbett Maths : www.corbettmaths.com
			AQA Revision Guide