

Year: 13 Subject: Mathematics - Statistics



Term	Week	Focus	Summary	Learning Outcomes	Learning skills
Term 2.1	1	Integration	Further Integration techniques	Explore partial fractions, odd and even powers of trigonometric functions and volumes of revolution.	<ul><li>Automaticity</li><li>Meta-cognition</li><li>Resilience</li></ul>
	2	Statistics	Estimation	Explore estimation of a sample.	<ul> <li>Critical and logical thinking</li> <li>Precision</li> <li>Intellectual playfulness</li> </ul>
	3	Differential equations	1st order differential equations	Explore forming and solving 1st order differential equations with separable variables	<ul> <li>Speed and accuracy</li> <li>Automaticity</li> <li>Flexible thinking</li> </ul>
	4	Numerical Methods	Estimating using non- calculus methods	Explore change of sign to find root in an interval, Iteration formula and its use to find roots of equations approximate values, estimating areas under curves using mid-ordinate and Simpson's rule.	<ul> <li>Originality</li> <li>Fluent thinking</li> <li>Generalisation</li> </ul>
	5	Vectors	Vector Algebra	Explore notation and arithmetic, position vectors in 3D, parallel vectors, unit vectors, magnitude of a vector.	<ul><li>Strategy planning</li><li>Connection finding</li><li>Self regulation</li></ul>
	6	Vectors	Vector Algebra	Explore properties of a line joining two points, vector equation of a straight line, intersecting lines.	<ul> <li>Critical and logical thinking</li> <li>Precision</li> <li>Intellectual playfulness</li> </ul>



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Term 2.2	1	Statistics	Estimation	Explore estimation of a sample.	<ul><li> Problem solving</li><li> Fluent thinking</li><li> Generalisation</li></ul>
	2	Statistics	Hypothesis Tests	The explore Hypothesis testing.	<ul> <li>Strategy planning</li> <li>Connection finding</li> <li>Self regulation</li> </ul>
	3	Statistics	Hypothesis Tests	To explore using a Hypothesis test to test for the averages.	<ul> <li>Big picture thinking</li> <li>Hard working</li> <li>Self regulation</li> </ul>
	4		Revision	Focused in class revision to supplement independent learning.	<ul> <li>Problem solving</li> <li>Automaticity</li> <li>Generalisation</li> </ul>
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