

Learning Programme – Mathematics – 3rd Year – Set 3

Topic/ Content	Objectives/Skills (topic grade in brackets)	Homework	Assessment	Success Criteria (GCSE grades)	Stretch & Challenge (Thirst for Learning)
	Trinity Term				
Standard Form	Writing very large and small numbers in standard form (4). Performing calculations with numbers in standard form (5).	Two to three teacher marked pieces of homework will be set each half-term.	End of Year Exam (close to May Half-Term), on all topics covered at Secondary school.	Mainly determined from End of Year Exam, however, Half-Term tests, class work & homework may also be used. GCSE Grade boundaries dependent on difficulty of test.	Students will be challenged using extension questions on the topics they are studying, designed to develop their ability to solve multi-staged problems.
Gradient and equations	Draw graphs of functions by plotting co-ordinates. Calculate and use gradient (3). Determine equation of straight line graphs (4).				
Simultaneous equations	Solving simultaneous equations graphically. Solving simultaneous equations by elimination and substitution (5). Forming, then solving simultaneous equations (5)				
Maps and plans	Use and construct scale drawings. Understanding and using bearings (3).				
Basic Probability	Understanding the language of probability and calculating probability using equally likely outcomes (3/4). Estimating probability using relative frequency and compare experimental probability to theoretical probability (4). Understand impact of different sample sizes. Record, describe and analyse probability experiments using tables and frequency trees (4).				
Combining Probabilities / Tree Diagrams	Calculating probability for mutually exclusive, independent and dependent events (6). Representing probabilities, using tree diagrams (7), two-way tables, sets and Venn diagrams (7).				
Loci and constructions	Constructing triangles using protractor, compass & ruler (3). Performing compass and straight edge constructions, including an angle of 60 (4). Solving locus problems (4). Know that the perpendicular distance from a point to a line is the shortest distance to the line.				