

Learning Programme – Mathematics – 5th Year – Set 2

Topic/ Content	Objectives/Skills (topic grade in brackets)	Homework	Assessment	Success Criteria (GCSE grades)	Stretch & Challenge (Thirst for Learning)
	Michaelmas First Half Term				
Removing brackets and factorising	Factorising quadratic expressions, of the form ax^2+bx+c , including the difference of two squares (5/7). Solving quadratic equations by factorising (5/7).	Two to three teacher marked pieces of homework will be set each half-term.	Half Term Test (week before October half-term)	Mainly determined from Half-Term test, however, 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.
Simultaneous equations	Solving simultaneous equations graphically. Solving simultaneous equations by elimination and substitution (5). Forming, then solving simultaneous equations (5).				
Brackets and quadratic equations 2	Solving quadratic equations by completing the square (8/9) and using the quadratic formula (7). Deduce turning points and the symmetrical property of a quadratic by completing the square (9). Solve problems by first forming quadratic equations. Solve simultaneous equations consisting of one quadratic and one linear equation (8).				
Algebraic Proof	Use algebra to prove number statements (7/8) and disprove number statements using a counter example (4).				
Sampling & secondary data	Understanding the handling data cycle and carrying out effective data collection (4). Identifying different types of data including qualitative, quantitative, discrete, continuous, primary and secondary data (4). Understanding different sampling methods and identifying possible bias (4). Calculating stratified samples.				
Histograms	Drawing and interpreting histograms (8). Calculating frequency density (7).				