

Learning Programme – Mathematics – 5th Year – Set 3

Topic/ Content	Objectives/Skills (topic grade in brackets)	Homework	Assessment	Success Criteria (GCSE grades)	Stretch & Challenge (Thirst for Learning)
	Michaelmas Second Half Term				
Removing brackets and factorizing	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.	December mock examination – three full GCSE papers	Determined from December mock examination. GCSE Grade boundaries dependent on the particular mock papers.	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 using the quadratic formula (7). Solve problems by first forming quadratic equations (7). Solve simultaneous equations consisting of one quadratic and one linear equation (8).				
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).				