



PEMBROKE
A PRIORY ACADEMY

Edexcel GCSE Mathematics



Why do you study GCSE Mathematics?



The mathematics GCSE will develop and test your knowledge and competency in three ways:

- *Mathematical Fluency* – teaching you how to use mathematical skills and procedures on a variety of concepts; from the simple, to the more complex.
- *Problem Solving* – teaching you how to approach unfamiliar multi-step questions.
- *Reasoning* – teaching you how to communicate effectively and explain using mathematical ideas.

What will I study?



Pupils are taught the skills and knowledge required to pass the course through a combination of teacher led sessions and spaced recall activities. They are given the chance to apply problem solving skills on a regular basis, employing concepts and learnt knowledge to more complex situations at every opportunity. Areas covered include number, algebra, ratio, proportion, geometry and measures, statistics and probability.

How will I be assessed?

Currently we use the Pearson Edexcel exam board which is assessed in the following way:



- Three examinations - Paper one is non-calculator, in papers two and three a calculator is permitted.
- Two Tiers - higher tier (awarding grades 3 to 9) or foundation tier (awarding grades U to 5)
- Each paper is worth eighty marks.

Which skills will I develop and use?



The intent of the department is that pupils have the skills and knowledge necessary to function in society and in every day adult life. From managing expenses and savings, organising and planning a journey to estimating a bill when out for a meal and choosing the most suitable mortgage deal. We also place a high emphasis on careers, and where appropriate use future employment opportunities to contextualise the mathematics that we deliver. At Priory Pembroke we strive to help our students become fluent in the fundamentals of mathematics. This is through tackling increasingly complex problems as they progress through the academy, pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly, accurately and use to solve complex problems.

How will I be able to use this subject in my future career?



Well-qualified mathematicians are always in demand when entering the job market. Particular careers which value employees with sound mathematical problem solving skills include construction industry such as electricians, plumbers, joiners, office administrators, RAF personnel, nursing or shop assistants. There are very few subjects in higher education for which mathematics at GCSE would not be useful. Opportunities are numerous for mathematics graduates and include career paths in areas such as business, science, accountancy or technical fields and disciplines such as social services, education and government.