



Preparation for Year 12



Maths

Congratulations on your GCSE successes and welcome to your post-16 studies at All Saints!

At this significant moment in your education, you have selected to study courses that reflect your own unique gifts, talents, interests and future goals.

So let's get started! These tasks are designed to introduce you to some concepts that you will be exploring over the year ahead as well as giving you the opportunity to demonstrate your commitment and sincere interest in this subject.

We look forward to seeing your preparation work and welcoming you to our department in September.

Aims	<i>To prepare for A level content.</i>
Deadline for submission	Wednesday 2nd September 2026

Keywords and definitions:

You will need to be familiar with the following keywords in term 1.

Keyword	Definition	Use of keyword within context
Calculus	The branch of mathematics involving derivatives and integrals, Calculus is the study of motion in which changing values are studied.	
Evaluate	This word means "to calculate the	



Preparation for Year 12



	numerical value".	
Exponent	The number that denotes repeated multiplication of a term, shown as a superscript above that term. The exponent of 3^4 is 4.	
Hyperbola	A type of conic section or symmetrical open curve. The hyperbola is the set of all points in a plane, the difference of whose distance from two fixed points in the plane is a positive constant.	
Irrational	A number that cannot be represented as a decimal or fraction. A number like pi is irrational because it contains an infinite number of digits that keep repeating. Many square roots are also irrational numbers.	