

Subject	Maths		
Title/Topic	Format	Length	WC
Pure	Written paper	2 hrs	
Applied (stats/mech)	Written paper	1hr 15	

In this Advent assessment I will be asked to show I can...

The whole of the year 12 content (most recent work on Modulus, algebraic fractions and binomial distribution are Year 13 content and are NOT tested).

Pure Mathematics:

- **Algebra and Functions:** This includes algebraic expressions, quadratics, equations and inequalities, graphs and transformations, and an introduction to polynomials with algebraic division and proof.
- **Coordinate Geometry:** Focuses on straight lines and circles.
- **Sequences and Series:** Covers arithmetic and geometric sequences and series, as well as the binomial expansion.
- **Trigonometry:** Includes trigonometric ratios, identities, equations, and radian measure.
- **Exponentials and Logarithms:** Covers exponential functions, logarithmic functions, and their related laws and applications, including modelling.
- **Differentiation:** Introduces differentiation, including finding gradients, tangents, and stationary points.
- **Integration:** indefinite with applications and definite integration finding areas and limits.
- **Vectors:** Covers 2D vectors.

Statistics:

- **Data Presentation and Interpretation:** Involves understanding and analysing different types of data presentations.
- **Probability:** Covers basic probability concepts and calculations.
- **Statistical Distributions:** Includes understanding and working with binomial distributions.

Mechanics:

- **Quantities and Units:** Deals with understanding different physical quantities and their units.
- **Kinematics:** Focuses on the motion of objects using variable and constant acceleration (SUVAT)
- **Forces and Newton's Laws:** Covers forces, Newton's laws of motion, and related concepts.

What should I do to revise and prepare for this assessment?

To prepare for this assessment:

1. Review the work you have completed in class this term. Work through the practice questions you have been provided after each lesson again so that you have a deep understanding of all the topics covered.
2. Complete the summer booklet.
3. Complete questions from your text book (provided within the powerpoints)

What useful websites/resources could I use to help me prepare?

Complete the summer booklet
Use integral – ppts/videos/redo tests
Maths genie
Text book (or online PDF)