Subject	Further Mathematics			
Title/Topic		**Format**	**Length**	**Date**
Paper 1 – Pure		Written Exam	2 hours 40 minutes	Thursday 5 January 9.15am – 11.55am
Paper 2 – Mechanics		Written Exam	1 hour 15 minutes	Monday 9 January 9.15am – 10.15am
Paper 3 – Modelling with Algorithms		Written Exam	1 hour 15 minutes	Thursday 12 January 12.40pm – 1.55pm

My Advent assessment will test my knowledge on…

Pure Content
Assessment may include question on the following topics:

- Hyperbolic functions, Maclaurin series
- The Argand diagram
- Solving a 1st order differential equation
- de Moivre's theorem
- Summation of series
- Improper integral
- The nth roots of a complex number
- Hyperbolic equation
- Linear transformations and their associated matrices
- Polar coordinates
- Proof by induction
- Points, lines and planes
- Roots and coefficients of a polynomial equation
- Partial fractions

Mechanics
Assessment may include question on the following topics:

- Dimensional analysis
- Forces
- Work, energy and power
- Momentum and impulse
- Centre of mass

Modelling with Algorithms
Assessment may include question on the following topics:

- Algorithms
- Networks
- Linear programming

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

To prepare for this assessment:

1. Attempt the practice paper provided to you
2. Review your classwork from this term
3. Complete and re-attempt the unit tests from integral.
4. Practice questions from your text book.
5. Review your class-based topic assessments completed so far this term.

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

https://integralmaths.org/

https://www.khanacademy.org/math

https://www.whitegroupmaths.com/

http://www.mathcentre.ac.uk/