



Subject	Mathematics	
Title/Topic	Format	Length
Paper 1	Written Assessment	45 minutes
Paper 2	Written Assessment	45 minutes

My Advent assessment will test my knowledge on...

Unit 1 – Algebra & Functions

- Essential manipulations of algebra
- Using the laws of indices
- manipulating surds
- Solving quadratics equations and work with quadratic graphs
- Solving simultaneous equations
- Solving linear and quadratic inequalities including using graphs
- Using graphs of functions and sketching simple transformations of graphs.

Unit 2 – Coordinate Geometry

- Solve problems with coordinate geometry in the (x, y) plane by understanding the equation of a straight line
- Parallel and perpendicular lines
- Find lengths and areas using equations of straight lines
- Find the midpoint of a line segment
- Understand and use the equation of a circle and be able to use the properties of chords and tangents.

Unit 3a - Algebraic Division, factor theorem, proof

- Algebraic fractions
- Polynomial division
- Factor theorem
- Proof by induction/deduction/counter-example

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 and revisit the integral assessments for the first two units covered this year.
3. Complete questions from your text book.
4. Complete the revision booklet provided to you by your class teacher.

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

www.integralmaths.org

<https://www.mathsgenie.co.uk/>