Autumn 1: September – October

What are we learning:

Trigonometry

6a Radians, including arcs and sectors

6b Small angles approximations

6c Reciprocal and inverse trig functions

6d Compound and double angle formulae

6e $R\cos(\theta \pm \alpha)$ and $R\sin(\theta \pm \alpha)$

6f Proving trig identities

6g Solving problems in context

Assessments:

- None

Support:

- Integral Maths
- ActiveLearn
- Showbie resources
- Year 13 drop in – Monday afterschool in A13

Autumn 2: October – December

What are we learning:

Regression and Correlation

S1a. Change of variable.

S1b. Correlation coefficient. Statistical hypothesis testing for zero correlation. Including Year 12 scatter graphs.

The Normal Distribution

S3a. Understand and use the normal distribution.

S3b. Use the normal distribution as an approximation to the binomial. Selecting the appropriate distribution

Assessments:

- Trigonometry assessment on topics 6a, 6b, 6c, 6d, 6e, 6f and 6g

Support:

- Integral Maths
- ActiveLearn
- Showbie resources
- Year 13 drop in – Monday afterschool in A13

Spring 1: January – February

What are we learning:

Statistics

S3c. Hypothesis testing for the mean of the Normal Distribution

Numerical methods

9a. Location of roots.

9b. Solving by iterative methods (knowledge of staircase and cobweb diagrams).

9c. Newton-Raphson method.

9d. Problem solving.

Assessments:

- Pure and Applied Mock Exam.

Support:

- Integral Maths
- ActiveLearn
- Showbie resources
- Year 13 drop in – Monday afterschool in A13

Spring 2: March – April

What are we learning:

Parametric Equations

7a. Definition and converting into Cartesian form.

7b. Curve sketching and modelling

7c. Differentiation and Integration of parametric functions

Assessments:

- No assessment. There is a possibility of a second mock – If this happens, it will be communicated to students in good time.

Support:

- Integral Maths
- ActiveLearn
- Showbie resources
- Year 13 drop in – Monday afterschool in A13

Summer 1: April – May

What are we learning:

Preparing for A-level exams

Assessments:

- External A-level Exams

Support:

- Integral Maths
- ActiveLearn
- Showbie resources
- Year 13 drop in – Monday afterschool in A13