## Mathematics

Content
The course develops, deepens and extends the mathematical skills necessary at this level and beyond.

Skills
Learners will be able to:

- understand and use a range of complex mathematical concepts and relationships
- select and apply operational skills in algebra, geometry, trigonometry, calculus and statistics within mathematical contexts
- select and apply skills in numeracy
- use mathematical reasoning skills to extract and interpret information and to use complex mathematical models
- use mathematical reasoning skills to think logically, provide justification or proof and solve problems
- communicate mathematical information with complex features



## Opportunities for Learners

Learners will be able to:

- select and apply mathematical techniques in a variety of mathematical situations
- develop confidence in the subject and a positive attitude towards further study in mathematics and the use of mathematics in employment
- study in-depth mathematical concepts and the ways in which mathematics describes our world
- interprete, communicate and manage information in mathematical form - vital skills for scientific and technological research and development
- use mathematical language and explore advanced mathematical ideas


## Assessment

- The course will be assessed through two question papers (exams), which will be marked by SQA and graded A to D.
- Question paper 1 makes up $47 \%$ of the total assessment mark and question paper 2 makes up $53 \%$.
- The question papers will assess the learner's understanding of the underlying processes involved in numerical, algebraic, geometric, trigonometric, calculus, and reasoning skills.
- For question paper 2, using a calculator allows more opportunity for application and reasoning when more complex calculations are required to solve problems.

Paper 1 Non-calculator 1 hour 30 minutes, 70 marks
Paper 2 Calculator 1 hour 45 minutes, 80 marks
Specimen Paper
www.sqa.org.uk/pastpapers/findpastpaper.htm

Progression Higher courses can stand alone or follow on from National 5 qualifications and may lead to Advanced Highers, the Scottish Baccalaureate and a range of qualifications within Further and Higher Education.

For course information, specimen question papers and past paper guidance visit: Higher Mathematics: www.sqa.org.uk/sqa/47910.html Curriculum for Excellence Key Terms and Features Factfile Education Scotland: https://education.gov.scot/nationalqualifications Further Information for Parents and Learners Information on assessment, skills, progression, revision resources and summaries of National Qualifications www.parentforumscotland.org

