

Guidance on the use of past paper questions for Higher Mathematics

The Curriculum for Excellence Higher Courses draw on the strengths of popular areas of study from the existing Higher, with the introduction of some new content. The purpose of this support document is to help centres and departments to identify suitable past paper questions/items that could be used, or possibly amended, to support learners in their preparation for sitting question papers (exams) as part of the Higher Course assessment. The advice in this document reflects questions selected from 2011 to 2013 [past papers](#). If you click on the highlighted links in the columns below, this will take you to the relevant past paper.

When utilising any past paper questions, you need to take into account the following:

- ◆ You must select questions that provide the learners with the same level of challenge as those in the Higher Specimen Question Paper.
- ◆ You may be able to use questions as published or with amendments as suggested in the columns below.
- ◆ You must use questions that adhere to the Higher General Marking Principles and reflect the form of detailed Marking Instructions as published in the Higher Specimen Question Paper.

If any change to a question/items is necessary, you must ensure that:

- ◆ The style and structure matches the Specimen Question Paper for Higher
- ◆ Marking of the learner's response to the question adheres to the General Marking Principles in the Higher Specimen Question Paper
- ◆ Marking Instructions are amended to reflect the style of the Higher detailed Marking Instructions.

The details below should be read in conjunction with the relevant:

Mandatory documentation:

- ◆ Course Specification
- ◆ Unit Specifications
- ◆ Course Assessment Specification

Advice and guidance:

- ◆ Course and Unit Support Notes

Assessment:

- ◆ Question Paper Component:
 - general assessment information
 - general marking principles and detailed marking instructions

Related Information as provided in the relevant N5-Higher Course Comparison Document.

Key for the section below:

C — amend context as required

S — amend source as required

St — amend question style

Str — amend structure of the question

Not all topics/areas of study will appear every year due to the sampling techniques used in producing question papers.

<p>Information from the Course Assessment Specification</p> <p>Each Section of the question paper will be made up of restricted/extended response questions. Questions will sample the knowledge and understanding and apply skills described in the Further mandatory information on Course coverage section.</p>	<p>The columns below identify additional support questions from Higher Past Papers 2011 to 2013.</p>	
	<p>Higher</p>	
	<p>Use question as published</p>	<p>Amend question style/structure</p>
<p>Algebraic and trigonometric skills</p>		
<p>Manipulating algebraic expressions</p>	<p>2013 P2 Q3 (a) 2011 P2 Q2 (c)</p>	<p>2013 P1 Q6 — st 2012 P1 Q20 — st 2011 P1 Q7 — st</p>
<p>Manipulating trigonometric expressions</p>	<p>2013 P1 Q23 2012 P1 Q22 (a) 2011 P2 Q6 (a)</p>	<p>2013 P1 Q9 — st P1 Q10 — st 2012 P1 Q5 — st 2011 P1 Q12 — st</p>
<p>Identifying and sketching related functions</p>	<p>2013 P1 Q21 2012 P2 Q4 2011 P1 Q22 (a), (c)</p>	<p>2013 P1 Q11 — st Q13 2012 P1 Q9 Q12 — st Q13 — st 2011 P1 Q3 — st Q17 — st</p>

Determining composite and inverse functions	2012 P2 Q1 2011 P2 Q2 (a), (b)	2013 P1 Q1 — st
Solving algebraic equations	2013 P2 Q5 P2 Q9 2012 P1 Q21 (a) P2 Q7 2011 P2 Q2 (d) P2 Q5	2013 P1 Q17 — st P1 Q20 — st 2011 P1 Q19 — st
Solving trigonometric equations	2013 P2 Q8 2012 P1 Q22b 2011 P1 Q23	2013 P1 Q15 — st 2011 P1 Q10 — st P1 Q20 — st
Geometric Skills		
Determining vector connections	2013 P1 Q24 2011 P2 Q1 (a), (b)	2011 P1 Q15 — st
Working with vectors	2012 P2 Q5 2011 P2 Q 1 (c)	2013 P1 Q12 — st P1 Q14 — st 2012 P1 Q7 — st P1 Q10 — st P1 Q15 — st P1 Q17 — st

		2011 P1 Q1 — st P1 Q14 — st
Calculus skills		
Differentiating functions		2013 P1 Q18 — st 2012 P1 Q6 — st P1 Q8 — st P1 Q16 — st 2011 P1 Q4 — st P1 Q13 — st
Using differentiation to investigate the nature and properties of functions	2013 P2 Q3 (b) 2012 P2 Q3 2011 P1 Q22 (b)	2013 P1 Q2 — st 2012 P1 Q2 — st P1 Q18 — st
Integrating functions		2013 P1 Q7 — st P1 Q16 — st 2012 P1 Q11 — st P1 Q14 — st 2011 P1 Q11 — st P1 Q16 — st
Using integration to calculate definite integrals	2013 P2 Q6 2011 P2 Q6 (b)	

Differentiating functions Applying differential calculus	2013 P2 Q7	
Applying integral calculus	2013 P2 Q4 2012 P1 Q21 (b) 2011 P2 Q4	
Algebraic and geometric skills		
Applying algebraic skills to rectilinear shapes	2013 P2 Q2 2012 P1 Q23 2011 P1 Q21	2013 P1 Q5 — st 2012 P1 Q4 — st 2011 P1 Q2 — st P1 Q8 — st
Applying algebraic skills to circles and graphs	2013 P1 Q22 2012 P2 Q2 2011 P2 Q7	2011 P1 Q6 — st
Modelling situations using sequences	2013 P2 Q1 2012 P2 Q6 2011 P2 Q3	2013 P1 Q8 — st 2012 P1 Q1 — st
Resources		
SQA past papers www.sqa.org.uk/pastpapers/findpastpaper.htm	Additional Higher assessment support material is available here: Education Scotland www.educationscotland.gov.uk/ Glow www.educationscotland.gov.uk/usingglowandict/ Glow Log-in https://secure.glowscotland.org.uk/login/login.htm	