edexcel

Edexcel Functional Skills qualification in Mathematics at Entry 1

Edexcel Functional Skills qualification in Mathematics at Entry 2

Edexcel Functional Skills qualification in Mathematics at Entry 3

Specification

Edexcel Levels Entry 1, Entry 2 and Entry 3

For first teaching September 2010

Issue 3

ALWAYS LEARNING PEARSON

Edexcel, BTEC and LCCI qualifications

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This specification is Issue 3. We will inform centres of any changes to this issue. The latest issue can be found on our website: qualifications.pearson.com

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Changes to Issue 2

This specification has been updated to Issue 3. The new qualification purpose and objectives have been added to page one.

Contents

Qualification titles covered by this specification

Edexcel Functional Skills qualification in Mathematics at Entry 1

Edexcel Functional Skills qualification in Mathematics at Entry 2

Edexcel Functional Skills qualification in Mathematics at Entry 3

Qualification purpose

Functional Skills Mathematics qualifications are designed to give learners the skills to operate confidently, effectively and independently in education, work and everyday life. They have been created in response to employers' perceptions that many learners are not achieving a sufficiently firm grounding in the basics.

These qualifications have been accredited onto the National Qualifications Framework (NQF) and are eligible for public funding as determined by the Department for Education (DfE) under Section 96 of the Learning and Skills Act 2000.

For details on funding availability, please check the Learning Aim Reference Service (LARS), which replaces the Learning Aim Reference Application. Centres should use the Qualification Number (QN) when they seek public funding for their learners.

These qualification titles and codes will appear on learners' certificate. Learners need to be made aware of this when they are recruited by the centre and registered with Pearson.

The QNs for the qualifications in this publication are:

Edexcel Functional Skills qualification in Mathematics at Entry 1	500/9172/4
Edexcel Functional Skills qualification in Mathematics at Entry 2	500/9196/7
Edexcel Functional Skills qualification in Mathematics at Entry 3	500/9295/9

Qualification objectives

The aims of these qualifications are to develop learner understanding and skills in:

- **Representing** – selecting the mathematics and information to model a situation.
- **Analysing** – processing and using mathematics.
- **Interpreting** – interpreting and communication the results of the analysis.

Structure of qualifications

Edexcel Functional Skills qualification in Mathematics at Entry 1

Entry 1: Mathematics	
Internally assessed Task availability: on demand Certification opportunities: please see our website	**100% of the total qualification**
Overview of content Representing using mathematics Analysing situations mathematically Interpreting solutions to problems using mathematics Coverage of mathematical content in number, geometry and statistics	
Overview of assessment Calculators are allowed Assessment can be tutor mediated The total number of marks available is 16 Assessment is 1 hour long	

Edexcel Functional Skills qualification in Mathematics at Entry 2

Entry 2: Mathematics	
Internally assessed Task availability: on demand Certification opportunities: please see our website	**100% of the total qualification**
Overview of content Representing using mathematics Analysing situations mathematically Interpreting solutions to problems using mathematics Coverage of mathematical content in number, geometry and statistics	
Overview of assessment Calculators are allowed Assessment can be tutor mediated The total number of marks available is 18 Assessment is 1 hour long	

Edexcel Functional Skills qualification in Mathematics at Entry 3

Entry 3: Mathematics	
Internally assessed Task availability: on demand Certification opportunities: please see our website	**100% of the total qualification**
Overview of content Representing using mathematics Analysing situations mathematically Interpreting solutions to problems using mathematics Coverage of mathematical content in number, geometry and statistics	
Overview of assessment Calculators are allowed Assessment can be tutor mediated The total number of marks available is 20 Assessment is 1 hour and 30 minutes long	

Edexcel Functional Skills qualification in Mathematics at Entry 1

NQF level: **Entry 1**

Guided learning hours: **45**

Process skills

Functional Skills qualifications in Mathematics assess the following three interrelated process skills.

Representing – selecting the mathematics and information to model a situation	**Analysing** – processing and using mathematics	**Interpreting** – interpreting and communicating the results of the analysis
• Learners recognise that a situation has aspects that can be represented using mathematics • Learners make an initial model of a situation using suitable forms of representation • Learners decide on the methods, operations and tools, including ICT, to use in a situation • Learners select the mathematical information to use	• Learners use appropriate mathematical procedures • Learners examine patterns and relationships • Learners change values and assumptions or adjust relationships to see the effects on answers in models • Learners find results and solutions	• Learners interpret results and solutions • Learners draw conclusions in light of situations • Learners consider the appropriateness and accuracy of results and conclusions • Learners choose appropriate language and forms of presentation to communicate results and solutions

Skill standards

In order to pass this qualification, the evidence that the learner presents for assessment needs to demonstrate that they can meet all the skill standards for the qualification. The coverage and range statements provide an indication of the type of mathematical content learners are expected to apply in functional, real-life, and everyday contexts.

Entry 1

On completion of this qualification a learner should:

Skill standards	Assessment weighting
Representing • understand simple mathematical information in familiar contexts and situations	30-40%
Analysing • use mathematics to obtain answers to simple given practical problems that are clear and routine • generate results that make sense for a specified task	30-40%
Interpreting • provide solutions to simple given practical problems in familiar contexts and situations	30-40%

Coverage and range

A learner should be able to:
• understand and use numbers with one significant figure in practical contexts • describe the properties of size and measure, including length, width, height and weight, and make simple comparisons • describe position • recognise and select coins and notes • recognise and name common 2-D and 3-D shapes • sort and classify objects practically using a single criterion

Assessment structure at Level 1

Assessment	Internally assessed.
Tasks	Controlled assessment task.
Assessment – taking time	1 hour
Marks	16 marks in total.
Additional information	Calculators are allowed. Opportunities to assess using tutor mediation and real-life objects. Opportunities to contextualise assessment according to learner interests.

Edexcel Functional Skills qualification in Mathematics at Entry 2

NQF level: **Entry 2**

Guided learning hours: **45**

Process skills

Functional Skills qualifications in Mathematics assess the following three interrelated process skills.

Representing – selecting the mathematics and information to model a situation	**Analysing** – processing and using mathematics	**Interpreting** – interpreting and communicating the results of the analysis
• Learners recognise that a situation has aspects that can be represented using mathematics • Learners make an initial model of a situation using suitable forms of representation • Learners decide on the methods, operations and tools, including ICT, to use in a situation • Learners select the mathematical information to use	• Learners use appropriate mathematical procedures • Learners examine patterns and relationships • Learners change values and assumptions or adjust relationships to see the effects on answers in models • Learners find results and solutions	• Learners interpret results and solutions • Learners draw conclusions in light of situations • Learners consider the appropriateness and accuracy of results and conclusions • Learners choose appropriate language and forms of presentation to communicate results and solutions

At Entry 2, the skills standards and coverage and range subsume the skill standards and indicative coverage and range at Entry 1, supporting progression to Entry 3.

Skill standards

In order to pass this qualification, the evidence that the learner presents for assessment needs to demonstrate that they can meet all the skill standards for the qualification. The coverage and range statements provide an indication of the type of mathematical content learners are expected to apply in functional, real-life, and everyday contexts.

Entry 2

On completion of this qualification a learner should:

Skill standards	Assessment weighting
Representing • understand simple practical problems in familiar contexts and situations • select basic mathematics to obtain answers	30-40%
Analysing • use basic mathematics to obtain answers to simple given practical problems that are clear and routine • generate results to a given level of accuracy • use given checking procedures	30-40%
Interpreting • describe solutions to simple given practical problems in familiar contexts and situations	30-40%

Coverage and range

A learner should be able to:
• understand and use whole numbers with up to two significant figures • understand and use addition/subtraction in practical situations • use doubling and halving in practical situations • recognise and use familiar measures, including time and money • recognise sequences of numbers, including odd and even numbers • use simple scales and measure to the nearest labelled division • know properties of simple 2-D and 3-D shapes • extract information from simple lists

Assessment structure at Entry 2

Assessment	Internally assessed.
Tasks	Controlled assessment task.
Assessment – taking time	1 hour
Marks	18 marks in total.
Additional information	Calculators are allowed. Opportunities to assess using tutor mediation and real-life objects. Opportunities to contextualise assessment according to learner interests.

Edexcel Functional Skills qualification in Mathematics at Entry 3

NQF level: **Entry 3**

Guided learning hours: **45**

Process skills

Functional Skills qualifications in Mathematics assess the following three interrelated process skills.

Representing – selecting the mathematics and information to model a situation	**Analysing** – processing and using mathematics	**Interpreting** – interpreting and communicating the results of the analysis
• Learners recognise that a situation has aspects that can be represented using mathematics • Learners make an initial model of a situation using suitable forms of representation • Learners decide on the methods, operations and tools, including ICT, to use in a situation • Learners select the mathematical information to use	• Learners use appropriate mathematical procedures • Learners examine patterns and relationships • Learners change values and assumptions or adjust relationships to see the effects on answers in models • Learners find results and solutions	• Learners interpret results and solutions • Learners draw conclusions in light of situations • Learners consider the appropriateness and accuracy of results and conclusions • Learners choose appropriate language and forms of presentation to communicate results and solutions

At Entry 3, the skills standards and coverage and range subsume the skill standards and indicative coverage and range at Entry 2, supporting progression from Entry to level 1.

Skill standards

In order to pass this qualification, the evidence that the learner presents for assessment needs to demonstrate that they can meet all the skill standards for the qualification.

The coverage and range statements provide an indication of the type of mathematical content learners are expected to apply in functional, real-life, and everyday contexts.

Entry 3

On completion of this qualification a learner should:

Skill standards	Assessment weighting
Representing • understand practical problems in familiar contexts and situations • begin to develop own strategies for solving simple problems • select mathematics to obtain answers to simple given practical problems that are clear and routine	30-40%
Analysing • apply mathematics to obtain answers to simple given practical problems that are clear and routine • use simple checking procedures	30-40%
Interpreting • interpret and communicate solutions to practical problems in familiar contexts and situations	30-40%

Coverage and range

A learner should be able to:
• add and subtract using three-digit numbers • solve practical problems involving multiplication and division by 2, 3, 4, 5 and 10 • round to the nearest 10 or 100 • understand and use simple fractions • understand, estimate, measure and compare length, capacity, weight and temperature • understand decimals to two decimal places in practical contexts • recognise and describe number patterns • complete simple calculations involving money and measures • recognise and name simple 2-D and 3-D shapes and their properties • use metric units in everyday situations • extract, use and compare information from lists, tables, simple charts and simple graphs

Assessment structure at Entry 3

Assessment	Internally assessed.
Tasks	Controlled assessment task.
Assessment – taking time	1 hour
Marks	20 marks in total.
Additional information	Calculators are allowed. Opportunities to assess using tutor mediation and real-life objects. Opportunities to contextualise assessment according to learner interests.

Assessment

At entry level assessment should take place when the learner is ready – i.e. practical activities and practice might take place many times until the tutor deems that the learner is capable of completing a task satisfactorily, and is ready to be assessed. Therefore, sufficient time should be built into the teaching schedule to allow learners to progress at their own rate. Should a learner not achieve the required standard for a task then further teaching and learning needs to take place for at least two weeks before an additional opportunity to complete a task successfully is organised.

At this level learners will require supported teaching and learning to ensure that they are sufficiently competent to meet requirements.

Features of assessment

Edexcel Functional Skills at Entry Level qualifications comprise a compulsory task that is internally assessed, internally verified and externally verified.

The main stages involved in assessment include:

- the learner responding to the task under controlled conditions
- the assessor deciding whether or not the response is sufficient, valid, authentic and of the required standard
- the Lead Internal Verifier for the Edexcel Functional Skills at Entry Level managing the internal verification of assessment outcomes
- the assessor giving the learner feedback on the results of the assessment.

Guidelines for assessment

All tasks are written to differentiate between levels in line with national standards.

Good practice has highlighted the importance of feedback for the learner. Feedback should focus on the learner's achievements, as well as guidance on how to improve skills required in a task response. A record of feedback is needed for the learner and for verification purposes. When resitting a task, learners must submit a different task to that originally completed.

Access arrangements and special requirements

Pearson's policy on Access Arrangements and Special Consideration aims to enhance access to the qualifications for learners with disabilities and other difficulties (as defined by the Equality Act 2010 and the amendments to the act) without compromising the assessment of skills, knowledge, understanding or competence.

Please read the *Inclusion information for Mathematics*, from the Functional Skills Standards below. Please also see our website for:

- how to request for access arrangements and special consideration
- deadlines for submission of the forms.

Requests for access arrangements and special consideration must be addressed to:

Special Requirements
Pearson
One90 High Holborn
London WC1V 7BH

Inclusion information for Mathematics

Learners can have access to all forms of equipment, software and practical assistance, such as a reader or a scribe, that reflect their normal way of working, provided that these do not affect the reliability or validity of assessment outcomes or give the learner an assessment advantage over other learners undertaking the same or similar assessments.

The following access arrangements may be requested:

- extra time
- reader
- oral language modifier
- sign language interpreter
- scribe
- word processor
- transcript
- practical assistant
- modified question papers (including Braille)
- models, visual/tactile aids, speaking scales.

No arrangements for exemptions exist for Functional Skills qualifications in Mathematics.

Storing the tasks

The component tasks must be kept secure and should not be used as part of the teaching and learning process.

Controlled conditions

Task setting: medium control

A *medium level of control* means that Pearson l will set three tasks at each entry level. Learners complete one task at the level that they are studying. These tasks will be replaced each year.

When will the tasks be available?

The tasks will be made available for centres before the start of the academic year. These will be available for secure download from our website.

Each task will be valid for submission on any assessment window in the forthcoming year.

When should the task be made available to learners?

Learners should be permitted access to the task only at the point of assessment.

Task taking: high control

Preparation

Learners' preparation for a task should include the development of functional skill. Preparation may take place under informal supervision.

- **Authenticity control**: preparatory work may be completed under limited supervision.
- **Supervision**: an appropriate person should supervise the learner. It is acceptable to use an assessor/invigilator who the learner feels comfortable with and knows well.
- **Dynamic assessment**: artefacts, flashcards and media may be used in assessment, provided the learner produces an independent response to the task.
- **Feedback**: tutors may support learners through the preparation process.
- **Collaboration**: learners may collaborate in preparation but must provide an individual response to the task.
- **Resources**: learners should use the range of appropriate resources available to the centre. The same range of resources must be made available to all learners within a centre.

The controlled assessment

The completion of a task must be under controlled conditions. During the assessment the learner must be in direct sight of the supervisor at all times. Input such as clarification of requirements, reading the questions etc is acceptable.

Learners must be provided with a suitably quiet, undisturbed location.

The accommodation normally used by learners may be used for assessment. There is no need to remove posters, displays or materials containing information relevant to that which is being assessed. However, displays should not provide a prepared answer to the task questions. It is acceptable for the learner to draw on external sources (with the exception of direct help from the assessor) during the assessment period.

Controlled conditions

Learners will be able to complete a task only when supervised. If this takes place over more than one session, learners' materials must be collected in at the end of each session, stored securely and handed back at the beginning of the next session. The task response must be collected in and retained at the end of the controlled assessment.

Learners with agreed particular requirements, in relation to their mode of learning or assessment can have their usual support, unless this compromises the outcome of the assessment. Those providing assistance should refer to appropriate access regulations on our website.

Learners can have access to:

- notes, which must be checked to ensure they do not include a pre-prepared response
- notes made during the assessment.

Learners **must not** have access to:

- a pre-prepared response.

Information and communication technology

Learners may use ICT equipment to complete their task but centres must ensure that there is no access to any pre-prepared materials on the hard drive.

Time

Centres should allow up to **one hour** for learners to complete the task at Entry 1 or Entry 2 and **one hour and 30 minutes** to complete the task at Entry 3. Additional time must be noted on the front of the task. This time may be distributed over one or more sessions at the centre's discretion.

Authentication

Learners' work must be authenticated by the centre.

Task marking: medium control

A *medium level of control* means that tutors/assessors mark the controlled assessment task using the mark scheme provided.

Pearson will conduct an annual review of the management of Functional Skills delivery and internal verification of assessment outcomes.

Pearson will sample the assessment outcomes through standards verification.

Quality assurance

Pearson monitors and supports centres in the effective operation of assessment and quality assurance. The methods which it uses to do this for Functional Skills include:

- a requirement that all centres have a robust system of internal verification of assessment and quality assurance
- assessment sampling and verification, through requested samples of completed assessed learner work and associated documentation
- overarching review and assessment of a centre's strategy for assessing and quality assuring its speaking, listening and communication Functional Skills programmes.

Edexcel Quality Assurance Handbook

Centres should refer to the *Entry Level Functional Skills Quality Assurance Handbook* (updated annually), for detailed guidance.

Centres must make certification claims only when authorised by Edexcel and strictly in accordance with requirements for reporting.

Centres that do not fully address and maintain rigorous approaches to quality assurance will be prevented from seeking certification for individual programmes or for all Functional Skills programmes. Centres that do not comply with remedial action plans may have their facility to deliver qualifications removed.

Pearson's qualification specifications clearly set out the standard to be achieved by each learner in order to achieve the award of the qualification. Pearson operates a quality assurance process, which is designed to ensure that these standards are maintained by all assessors and verifiers. It achieves this through the following activities.

Internal verification

Centres are required to have robust processes in place to ensure that each assessor's decisions are reviewed so that they are correctly interpreting and applying the standards set out in the specifications. Choice and application of an appropriate system is a matter for individual centres. Pearson fully supports the use of the centre's own quality assurance systems where this ensures robust internal standardisation. Centres should refer to the *Entry Level Functional Skills Quality Assurance Handbook* (updated annually).

External verification

Pearson will sample assessors' decisions using subject-specialist external verifiers. This process will follow the protocol as set out in the *Entry Level Functional Skills Quality Assurance Handbook* (updated annually).

The external verifier assigned to the centre will identify, through negotiation with the programme coordinator, the learners' work which will be subject to external verification. Centres will be required to make available work which provides evidence for the assessment (in whole or in part) of the identified functional skill. The learner work **must** have been internally assessed, and for the learners' work submitted at least 50 per cent of the number of samples **must** have been internally verified.

Centres should refer to the *Entry Level Functional Skills Quality Assurance Handbook* (updated annually).

Centre quality review and development

Pearson has a commitment to a strategic, risk-based approach to safeguarding security for the awarding of qualifications where assessment is delegated to centres. Quality assurance arrangements are deliberately focused on the ability of centres to manage the delivery of programmes and effective internal quality assurance, to ensure that assessment is carried out to the appropriate standards.

Each centre will receive periodic visits for the purpose of centre quality review and development.

Entry, awarding and reporting

Learner entry

Details of learner entry requirements, and the number of assessment opportunities, can be found in our *UK Information Manual*, which is sent to all examinations officers. Our Information Manual is updated regularly and can be found on our website.

Awarding and reporting

The awarding and certification of this qualification will comply with the requirements of the Office of the Qualifications and Examinations Regulator (Ofqual). The qualification will be awarded as a pass or fail. The result for a learner who fails to reach the minimum standard for a pass to be awarded will be recorded as U (unclassified) and will not be certificated.

Qualification results

These qualifications are assessed as pass or fail. They are not graded. Learners must pass the task at the level for which they are entered to be awarded a qualification pass.

Resitting

Learners must take a different version of the task to that originally taken.

Language of assessment

Assessment of this qualification will be available in English only. Assessment materials will be published in English only and all work submitted for examination and moderation must be produced in English.

Malpractice and plagiarism

For up-to-date advice on malpractice and plagiarism, please refer to the Joint Council for Qualifications *Suspected Malpractice in Examinations and Assessments* document on the JCQ website (www.jcq.org.uk).

Progression

Learners could progress from this award to:

- Edexcel Functional Skills qualification in Mathematics at Level 1
- level 1 BTEC qualifications in a relevant vocational sector
- other related qualifications.

Annexe A

Codes

Type of code	Use of code	Code number
National Qualifications Framework (NQF) codes	Each qualification title is allocated an Ofqual National Qualifications Framework (NQF) code. The Ofqual National Qualifications Framework (NQF) code is known as a Qualification Number (QN). This is the code to be used for all qualification funding purposes. The Ofqual QN is the number that will appear on the learner's final certification documentation.	The QNs for the qualifications in this publication are: Entry 1 – 500/9172/4 Entry 2 – 500/9196/7 Entry 3 – 500/9295/9
Entry codes	The entry codes are used to: • enter a learner for the assessment of a qualification/component • aggregate the learner's unit scores to obtain the overall grade for the qualification.	Please refer to our *UK Information Manual*, available on our website.

Annexe B

Glossary of qualification format terms

All Edexcel Functional Skills qualifications have a standard format. The format is designed to give the requirements of the qualification for learners, tutors, assessors and those responsible for monitoring national standards.

Each qualification has the following sections.

Qualification title

The title is accredited on the National Qualifications Framework (NQF) and this form of words will appear on the learner's Notification of Performance (NOP).

NQF level

All units and qualifications within the NQF will have a level assigned to them, which represents the level of achievement. There are nine levels of achievement, from entry level to level 8. The level of the unit has been informed by the NQF level descriptors.

GLH

This is the guided learning hours required to teach the qualification.

Cash-in code

This is the Pearson code required to claim certification for the whole qualification after completion of all components.

Skill standards

The skill standard of a qualification sets out the functional skills that learners are expected to achieve as the result of a process of learning.

Process skills

Process skills require learners to represent, analyse and interpret using mathematics. The process skills are assessed through the skills standards.

Coverage and range

The coverage and range specifies the mathematical content the learner should be able to apply to demonstrate a skill standard. The skill standard and coverage and range articulate the learning achievement which will be awarded at the level assigned to the qualification.

Assessment structure

This includes details of the component/s of assessment and the key features of each component.

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visit qualifications.pearson.com