



Qualification Specification
Functional Skills in Mathematics
Entry Levels 1, 2 and 3

Version 3.1
(February 2018)

This qualification specification covers the following qualifications:

Qualification Title	Qualification Number
Gateway Qualifications Functional Skills Qualification in Mathematics at Entry 1	601/7856/5
Gateway Qualifications Functional Skills Qualification in Mathematics at Entry 2	601/7857/7
Gateway Qualifications Functional Skills Qualification in Mathematics at Entry 3	601/7858/9

About this qualification specification

This qualification specification is intended for Tutors, Assessors, Internal Quality Assurers, Centre Quality Managers and other staff within Gateway Qualifications recognised centres and/or prospective centres.

It sets out what is required of the learner in order to achieve the qualification. It also contains information specific to managing and delivering the qualification(s) including specific quality assurance requirements.

The guide should be read in conjunction with the Gateway Qualifications Centre Handbook and other publications available on the website which contain more detailed guidance on assessment and verification practice.

In order to offer this qualification, you must be a Gateway Qualifications recognised centre.

If your centre is not yet recognised, please contact our Development Team to discuss becoming Gateway Qualifications Recognised Centre:

Telephone: 01206 911211

Email: enquiries@gatewayqualifications.org.uk

Website: <https://www.gatewayqualifications.org.uk/advice-guidance/delivering-our-qualifications/become-recognised-centre/>

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1. Qualification Information

1.1 About the qualifications

The qualification(s) has been approved by the Office of Qualifications and Examinations Regulation (Ofqual) that regulates qualifications, examinations and assessments in England.

1.2 Purpose

Functional skills are designed to equip learners with the skills to operate confidently, effectively and independently in life, learning and work. They have been designed in response to employers' perceptions that many learners are not achieving a firm enough grounding in the basics.

The purpose of the Gateway Qualifications Functional Skills in Mathematics at Entry 1, 2 and 3 is to ensure that learners develop understanding and skills in the three interrelated mathematical process skills of:

- representing;
- analysing;
- and interpreting within functional contexts.

1.3 Objective

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

Entry 1:

Representing

- Understand simple mathematical information in familiar contexts and situations.

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.

Interpreting

- Provide solutions to simple given practical problems in familiar contexts and situations.

Entry 2

Representing

- Understand simple practical problems in familiar contexts and situations.
- Select basic mathematics to obtain answers.

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.

Interpreting

- Describe solutions to simple given practical problems in familiar contexts and situations.

Entry 3

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.

Analysing

- Apply mathematics to obtain answers to simple given practical problems that are clear and routine.
- Use simple checking procedures.

Interpreting

- Interpret and communicate solutions to practical problems in familiar contexts and situations.

1.4 Key Facts

Qualification Title	Total Qualification Time	Guided Learning Hours
Gateway Qualifications Functional Skills Qualification in Mathematics at Entry 1	48	45
Gateway Qualifications Functional Skills Qualification in Mathematics at Entry 2	50	45
Gateway Qualifications Functional Skills Qualification in Mathematics at Entry 3	50	45

Total Qualification Time is the number of notional hours which represents an estimate of the total amount of time that could be reasonably expected to be required for a Learner to achieve and demonstrate the achievement of the level of attainment necessary for the award of the qualification.

Total Qualification Time is comprised of the following two elements:

- The number of hours which an awarding organisation has assigned to a qualification for Guided Learning, and

- An estimate of the number of hours a Learner will reasonably be likely to spend in preparation, study or any other form of participation in education or training, including assessment, which takes place by – but, unlike Guided Learning, not under the Immediate Guidance or Supervision of – a lecturer, supervisor, tutor or other appropriate provider of education or training.

1.5 Geographical Coverage

This qualification has been approved by Ofqual to be offered in England.

1.6 Progression Opportunities

Learners achieving a Functional Skill in Mathematics at Entry 1, Entry 2 or Entry 3 will be able to progress to the next level.

1.7 Links with other qualifications

Functional Skills in Mathematics at Entry Level 1, 2 and 3, and Levels 1 and 2, can be offered as stand-alone qualifications for Key Stage 3, 4 and post-16 learners.

Functional Skills are a component of Apprenticeship programmes.

1.8 Relationship with other frameworks

The Gateway Qualifications Functional Skills qualifications in Mathematics are based on the national Functional Skills standards and consistent with National Curriculum Mathematics and Adult Numeracy standards at the corresponding levels:

Entry 1:

- National Curriculum Mathematics level 1;
- Adult Numeracy standards at Entry 1.

Entry 2:

- National Curriculum Mathematics levels 1–2;
- Adult Numeracy standards at Entry 2.

Entry 3:

- National Curriculum Mathematics levels 1–3;
- Adult Numeracy standards at Entry 3.

2 Learner Entry Requirements

2.1 Age

The approved age range for these qualifications is: pre-16; 16-18; 19+

2.2 Prior Qualifications or Units

There is no requirement for learners to have achieved prior qualifications or units.

2.3 Prior Skills/Knowledge/Understanding

Learners should be able to evidence mathematical skills at the level below their chosen entry point to these qualifications.

2.4 Restrictions

There are no restrictions to entry.

3 Achieving the Qualification

3.1 Qualification Achievement

Functional Skills mathematics qualifications are single component qualifications.

Functional skills qualifications in mathematics assess the following three inter-related 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
<ul style="list-style-type: none"> • 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 information and communication technology (ICT), to use in a situation • Learners select the mathematical information to use. 	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • 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.

In order for a learner to be awarded the qualification they must achieve a pass in the assessment paper which tests their ability to apply the three process skills above.

4 Assessment Specification

Gateway Qualifications Functional Skills qualification in Mathematics at Entry 1

Skills standards and coverage and range

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.

On completion of this qualification a learner should:

Skill standards	Coverage and range	Assessment weighting
Representing 1. Understand simple mathematical information in familiar contexts and situations	a) Understand and use numbers with one significant figure in practical contexts; b) Describe the properties of size and measure, including length, width, height and weight, and make simple comparisons; c) Describe position; d) Recognise and select coins and notes; e) Recognise and name common 2D and 3D shapes; f) Sort and classify objects practically using a single criterion	30-40%
Analysing 2. Use mathematics to obtain answers to simple given practical problems that are clear and routine. 3. Generate results that make sense for a specified task.		30-40%
Interpreting 4. Provide solutions to simple given practical problems in familiar contexts and situations.		30-40%

Assessment Structure Entry 1

Method of assessment	Externally set and internally marked
Assessment time	1 hour
Task/questions	Learners will be required to answer a series of questions relating to a single scenario. A variety of simple question types will be used, including short answer and multiple choice. Learners need to show their working in the space provided, so that they can be credited for using an appropriate method even when that has not resulted in the correct answer.
Marks	20
Availability of Tasks	On demand
Additional information	<p>Calculators are permissible.</p> <p>Centres may contextualise the assessment.</p> <p>Learners may complete the candidate workbook over a number of sessions, providing centres retain assessment materials securely in between sessions and learners spend no more than a total of one hour on the assessment tasks.</p>

Gateway Qualifications Functional Skills qualification in Mathematics at Entry 2

Skills standards and coverage and range

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.

On completion of this qualification a learner should:

Skill standards	Coverage and range	Assessment weighting
Representing 1. Understand simple practical problems in familiar contexts and situations. 2. Select basic mathematics to obtain answers.	a) Understand and use whole numbers with up to two significant figures; b) Understand and use addition/subtraction in practical situations; c) Use doubling and halving in practical situations; d) Recognise and use familiar measures, including time and money; e) Recognise sequences of numbers, including odd and even numbers; f) Use simple scales and measure to the nearest labelled division; g) Know properties of simple 2D and 3D shapes; h) Extract information from simple lists.	30-40%
Analysing 3. Use basic mathematics to obtain answers to simple given practical problems that are clear and routine. 4. Generate results to a given level of accuracy. 5. Use given checking procedures.		30-40%
Interpreting 6. Describe solutions to simple given practical problems in familiar contexts and situations.		30-40%

Assessment Structure Entry 2

Method of assessment	Externally set and internally marked
Assessment time	1 hour
Task/questions	<p>Learners will be required to answer a series of questions relating to a single scenario. A variety of simple question types will be used, including short answer and multiple choice. Learners will also be asked to provide simple explanations for their answers to a small number of questions.</p> <p>Learners need to show their working in the space provided, so that they can be credited for using an appropriate method even when that has not resulted in the correct answer</p>
Marks	20
Availability of Tasks	On demand
Additional information	<p>Calculators are permissible.</p> <p>Centres may contextualise the assessment.</p> <p>Learners may complete the candidate workbook over a number of sessions, providing centres retain assessment materials securely in between sessions and learners spend no more than a total of one hour on the assessment tasks.</p>

Gateway Qualifications Functional Skills qualification in Mathematics at Entry 3

Skills standards and coverage and range

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.

On completion of this qualification a learner should:

Skill standards	Coverage and range	Assessment weighting
<p>Representing</p> <p>1. Understand practical problems in familiar contexts and situations.</p> <p>2. Begin to develop own strategies for solving simple problems.</p> <p>3. Select mathematics to obtain answers to simple given practical problems that are clear.</p>	<p>a) Add and subtract using three-digit numbers;</p> <p>b) Solve practical problems involving multiplication and division by 2, 3, 4, 5 and 10;</p> <p>c) Round to the nearest 10 or 100.</p> <p>d) Understand and use simple fractions;</p> <p>e) Understand, estimate, measure and compare length, capacity, weight and temperature;</p>	30-40%
<p>Analysing</p> <p>4. Apply mathematics to obtain answers to simple given practical problems that are clear and routine.</p> <p>5. Use simple checking procedures.</p>	<p>f) Understand decimals to two decimal places in practical contexts;</p> <p>g) Recognise and describe number patterns;</p> <p>h) Complete simple calculations involving money and measures.</p> <p>i) Recognise and name simple 2D and 3D shapes and their properties;</p>	30-40%
<p>Interpreting</p> <p>6. Interpret and communicate solutions to practical problems in familiar contexts and situations.</p>	<p>j) Use metric units in everyday situations;</p> <p>k) Extract, use and compare information from lists, tables, simple charts and simple graphs.</p>	30-40%

Assessment Structure Entry 3

Method of assessment	Externally set and internally marked
Assessment time	1 hour
Task/questions	<p>Learners will be required to answer a series of questions relating to a single scenario. A variety of simple question types will be used, including short answer and multiple choice. Learners will also be asked to provide simple explanations for their answers to a small number of questions.</p> <p>Learners need to show their working in the space provided, so that they can be credited for using an appropriate method even when that has not resulted in the correct answer</p>
Marks	25
Availability of Tasks	On demand
Additional information	<p>Calculators are permissible.</p> <p>Centres may contextualise the assessment.</p> <p>Learners may complete the candidate workbook over a number of sessions, providing centres retain assessment materials securely in between sessions and learners spend no more than a total of one hour on the assessment tasks.</p>

5 Assessment Arrangements

The following are in addition to the standard assessment and quality assurance requirements set out in the Gateway Qualifications Centre Handbook.

5.1 Assessment

At Entry level, assessment should take place when the learner is ready, ie practical activities and practice might take place many times before the tutor deems the learner capable of completing a task satisfactorily, and is ready to be assessed. Therefore, sufficient time should be built in the learning programme to allow learners to progress at their own rate. Should a learner not achieve the required standard for a task, further teaching and learning should take place for before an additional opportunity to complete a task successfully is organised.

At this level learners will require much supported practice in order to ensure that they are sufficiently competent to meet the requirements of the mark scheme.

5.2 Initial Assessment and Induction

An initial assessment of each learner should be made before the start of their programme to identify:

- their current mathematical skills and areas for development
- any mathematics qualifications/units they may have completed previously
- the Functional Skills levels they should work towards.

We recommend that centres provide an induction programme so the learner fully understands the requirements of the Functional Skills qualification(s) they work towards, their responsibilities as a learner, and the responsibilities of the centre. This information can be recorded on a learning contract.

5.3 Features of assessment

Gateway Qualifications Functional Skills in Mathematics at Entry level comprise of externally set candidate workbooks that are internally assessed, internally quality assured and externally quality assured.

5.4 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 their skills.

5.5 Storing assessments (Candidate Workbooks)

Candidate workbooks must be kept secure and should not be used as part of the teaching and learning process.

5.6 Assessment taking – Controlled Conditions

All assessments must be taken under controlled conditions. This means that the learner must be supervised at all times during the assessment.

Learners must be provided with a suitably quiet, undisturbed location, with adequate heating and lighting. 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 what is being assessed. However, materials should not provide a prepared answer to the task.

If the assessment 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 completed assessment record sheets and assessment evidence must be retained at the end of the controlled assessment for verification purposes.

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 detailed in the specification.

Assessors may read/explain the rubrics on the tasks but not the texts or questions. Assessors must not interpret the words for learners.

Before learners begin the controlled assessment tasks, tutors should help learners become familiar with the various words and phrases used within the candidate workbooks for example "put a tick in the correct box", "complete the sentence".

Centres may adapt the scenario used in a candidate workbook, adjusting the contextual detail in the questions as required. For example, a centre might decide that planning a barbecue was not appropriate for their learners and change the context to planning a picnic; this might mean altering the items on the shopping list provided

within the candidate workbook. Where centres adapt a candidate workbook they must use the mark scheme provided by Gateway Qualifications.

Centres will need to retain samples of learners' work as part of their internal quality management process.

5.7 Authentication

Learners' work must be authenticated by the centre.

5.8 Re-sitting an Assessment

Learners may re-sit. There is no minimum time between assessment attempts; although where learners have been unsuccessful in a particular area they will need adequate opportunity for further practice in the relevant skill.

Learners are **not** allowed to make another attempt at the same candidate workbook.

5.9 Access to qualifications for learners with disabilities or specific needs

It is Gateway Qualifications' aim that there shall be equal opportunities within this organisation and in all the services it provides and within its recognised centres and via the services they provide and so meet the organisation's legal responsibilities to prevent discrimination.

In particular it is the organisation's intention that there should be no discrimination on the grounds of a protected characteristic including age, disability, gender assignment, marriage and civil partnership, pregnancy and maternity, race, religion and belief, sex, sexual orientation. It is acknowledged that this is not an exhaustive list.

Gateway Qualifications and recognised centres have a responsibility to ensure that the process of assessment is robust and fair and allows the learner to show what they know and can do without compromising the assessment criteria.

Details on how to make adjustments for learners is set out in the Gateway Qualifications Reasonable Adjustment and Special Considerations Policy.

In completing assessment leading to Functional Skills in Mathematics qualifications, candidates can have access to all forms of equipment, software and assistance (e.g. scribe, reader) that constitute their normal way of working. However, these must not affect the reliability or validity of assessment outcomes or give the candidate an assessment advantage over other candidates undertaking the same or similar assessments.

The table below indicates the permitted range of adjustments that might be considered.

Access Arrangement	Permitted?
Additional time	Yes
Human reader	Yes
Computer/screen reader (assistive technology)	Yes
Oral Language Modifier	Yes
Sign Language Interpreter	Yes
Human scribe	Yes
Voice recognition technology (assistive technology)	Yes
Transcript	Yes
Word Processor	Yes
Practical assistant	Yes
Modified materials (including Braille)	Yes
Models, visual/tactile aids, speaking scales	Yes
External device to load personal settings	Yes

5.10 Additional Requirements/Guidance

There are no additional rules or guidance regarding learner entry requirements.

5.11 Recruiting Learners with Integrity

It is vital that centres recruit with integrity with regard to qualifications. Centres must ensure that learners have the correct information and advice on their selected qualification(s) and that the qualification(s) will meet their needs.

The recruitment process must include the centre assessing each potential learner and making justifiable and professional judgements about the learner's potential to successfully complete the assessment and achieve the qualification. Such an assessment must identify, where appropriate, the support that will be made available to the learner to facilitate access to the qualification(s).

6 Quality Assurance

6.1 Centre Staffing Requirements

Tutors/Assessors delivering the Gateway Qualifications Functional Skills qualifications must hold a recognised teaching qualification or be occupationally competent in Mathematics or achieved the qualification themselves at Level 2.

Internal Quality Assurers in addition to being Functional Skills Tutors/Assessors will need to hold a recognised internal quality assurance/verification qualification or be working towards one.

Please refer to the Functional Skills Centre Handbook for further information.

6.2 Internal Quality Assurance

Internal quality assurance is the process through which internal assessment is monitored by the centre, through sampling and evaluating its assessment practice, to make sure that it meets required standards and through which adjustments to results can be made where required to ensure consistency and fairness.

It involves two key processes – monitoring assessment practice and standardising assessment judgements – and is carried out by one or more Internal Quality Assurer.

Centres will need to develop a suitable quality assurance strategy which will depend on the size and extent of the qualifications delivered. Centres will need to set out their internal quality assurance systems within a plan. It is advisable to schedule internal quality assurance when the qualification delivery is being planned.

Please refer to the Functional Skills Centre Handbook for further information.

6.3 Standards Verification

As part of the quality assurance process, centres are subject to standards verification during course delivery. A Functional Skills standards verifier will be allocated to your centre who will then contact you to arrange a suitable time to visit. The standards verifier is responsible for the standards verification of internally marked Functional Skills assessments and ensuring that your internal quality assurance systems meet the key quality standards set out by Gateway Qualifications.

Centre will be required to notify Gateway Qualifications of times and dates and cohort details of when assessments are due to take place. Gateway Qualifications will either undertake a scheduled or unannounced visit.

Centres must make learner assessments available for observation. Failing to provide access to learner assessments may result in the cancellation of the visit which could then delay certification claims.

Please refer to the Functional Skills Centre Handbook for further information.

7 What to do next

For existing centres please contact your named Development Manager or Development Officer.

For organisations, not yet registered as Gateway Qualifications centre please contact:

Gateway Qualifications
Gateway House
3 Tollgate Business Park
Colchester
CO3 8AB

Tel: 01206 911211

Email: enquiries@gatewayqualifications.org.uk

8 Gateway Qualifications

Gateway Qualifications, a not for profit registered charity, is an Awarding Organisation based in Colchester.

We work with learning providers and industry experts to design and develop qualifications that benefit the learner and the employer.

We support flexible, responsive and quality assured learning opportunities whether it's in the classroom, at work, in the community or through distance learning.

We are recognised by Ofqual, to design, develop and submit qualifications to the Regulated Qualifications Framework (RQF).

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