Change lives through learning

Open Awards Level 2 Functional Skills Qualification in

Mathematics

QAN: 603/4806/9

Qualification Guide

Contents

Version Control	
v 1.0	New document September 2019
v 1.1	Reviewed March 2023 to update wording. No substantive changes.
v 2.0	May 2025 full review and rebrand. Amended subject content to meet DfE updates (no material changes). Scheduling and results timeframes updated.

About the Qualification

Title	Open Awards Level 2 Functional Skills Qualification in Mathematics
Qualification Accreditation Number	603/4806/9
Sector	14.1 Foundations for Learning and Life
Level	Level Two (2)
Funding	Please click here for more information
Pricing Information	Please click here for more information
Review Date	31/07/2031

Purpose	Prepare for Further Learning or Training and/or Develop Knowledge and/or Skills in a Subject Area
Sub-Purpose	Develop Knowledge and/or Skills in a Subject Area

Total Qualification Time/Guided Learning	
Total Qualification Time (hours)	60
Guided Learning (hours)	55

Age Range and Restrictions	
Pre-16	✓
16 – 18	✓
18+	✓
Any other restrictions specific to the qualification(s)	None

About Functional Skills Qualifications

Functional Skills qualifications should provide reliable evidence of a learner's achievements against demanding content that is relevant to the workplace. They need to provide assessment of learners' underpinning knowledge, as well as their ability to apply this in different contexts. They also need to provide a foundation for progression into employment or further technical education and develop skills for everyday life. In some contexts, Functional Skills qualifications will also play a part in the Government's accountability systems.

A key aim for Functional Skills Mathematics specifications is to enable the learner to demonstrate a sound grasp of mathematical skills at the appropriate level and be able to apply mathematical thinking effectively to solve problems successfully in the workplace and in other real-life situations.

Purpose of Functional Skills Mathematics for Level 1 and Level 2: a qualification for work, study and life.

Achievement of the qualification demonstrates a sound grasp of mathematical skills at the appropriate level and the ability to apply mathematical thinking effectively to solve problems successfully in the workplace and in other real-life situations.

Achievement of the Qualification

To achieve this qualification, learners must successfully pass at Level 2:

- One externally set and marked assessment in Mathematics (including a calculator and non-calculator section).

A learner is awarded a 'pass' or 'fail' result for the qualification.

Any Specified Entry Requirements

There are no restrictions on learner entry to these qualifications. However, it is recommended that learners undertake a comprehensive initial diagnostic assessment to ensure that they are following an appropriate learning programme leading to a summative assessment.

Assessment Method Summary

Achievement of the Functional Skills Mathematics qualifications is through successful completion of a task-based assessment at Level 2 which are:

- Externally-set and externally marked assessment paper, including a calculator and non-calculator section.

Sample assessments are available on the Portal and can be accessed by the Assessment Administrator contact at your provider. Sample assessments cover both paper-based and on-screen modes of delivery. In addition, there are practice mathematics questions for the functionality utilised for on-screen assessments and demonstration videos of how to use this functionality. Providers must ensure that learners have utilised these question types in advance of sitting an on-screen assessment to ensure they are familiar with the assessment platform and potential question types.

The assessment tasks are based on real-life contexts. Contexts may be based on:

- Work and education
- Community, citizenship and environment
- Family, home and social issues

The amount of time allocated for the assessment is 2 hours.

The assessment is split into the following sections:

- Section A: 30 minutes (non-calculator) – worth 25% of the marks
- Section B: 1 hour and 30 minutes (calculator) – worth 75% of the marks

Both parts must be completed in one assessment session.

All assessments must be taken under controlled assessment conditions. Further guidance can be found in Open Awards' Instructions for Conducting Controlled Assessments or Open Awards' Instructions for Conducting Controlled Assessments Remotely available via the Portal.

The assessment can be carried out by either on-screen or by paper-based modes of delivery.

On-screen assessments are delivered on demand via the XAMS assessment system.

Paper-based assessments are printed by Open Awards and sent to the provider in line with the published assessment calendar.

Completed paper-based assessment papers must be returned according to the instructions provided by Open Awards within the specified timeframe.

All assessments are marked within the XAMS assessment platform by Open Awards markers, and results are released within the XAMS assessment platform.

The use of other electronic devices, including phones and smart-watches are not allowed at any time during the assessment.

When completing the non-calculator section, learners will not be allowed access to external aids in relation to calculations, including traditional calculators and smartphones, watches and other electronic devices.

When completing the calculator section, learners will be allowed to make use of a non-scientific calculator (for paper-based and on-screen assessments) or the onscreen calculator (on-screen assessment).

Reasonable adjustments and special considerations may be required for individual learners to enable them to undertake assessments fairly. Please see our Reasonable Adjustments and Special Considerations Policy available on the Portal for details on how to apply for and implement these measures.

Subject Content

Open Awards Level 2 Functional Skills Qualification in Mathematics supports learners to apply their mathematical skills, through appropriate reasoning and decision making, to solve realistic problems of increasing complexity.

Functional Skills maths qualifications at these levels should:

- indicate that students can demonstrate, through appropriate reasoning and decision-making, their ability:
    - in mathematical skills
    - to apply these to solve realistic problems of increasing complexity
- introduce students to new areas of life and work so that they are exposed to concepts and problems that, while not of immediate concern, may be of value later
- enable students to develop an appreciation of the role played by maths at work and in life generally

Scope of Study

The Scope of Study (SoS) for Mathematics, including the SoS references from the DfE Subject Content is included below:

Use of number and the number system:

Learners at Level 2 are expected to be able to:

- use numbers of any size
- read, write and make use of:
    - positive integers of any size
    - negative integers of any size
- use, order and compare:
    - integers
    - fractions
    - decimals
    - percentages
    - ratios
- recognise the value of a digit in any:
    - whole number
    - decimal number
- use numerical and spatial patterns for a purpose and calculate with, and convert between, numbers written as fractions, decimals, percentages and ratios

Level 2 - Using numbers and the number system – *whole numbers, fractions, decimals and percentages*	
SoS1. Read, write, order and compare positive and negative numbers of any size	SoS2. Carry out calculations with numbers up to one million including strategies to check answers including estimation and approximation
SoS3. Evaluate expressions and make substitutions in given formulae in words and symbols	SoS4. Identify and know the equivalence between fractions, decimals and percentages
SoS5. Work out percentages of amounts and express one amount as a percentage of another	SoS6. Calculate percentage change (any size increase and decrease), and original value after percentage change
SoS7. Order, add, subtract and compare amounts or quantities using proper and improper fractions and mixed numbers	SoS8. Express one number as a fraction of another
SoS9. Order, approximate and compare decimals	SoS10. Add, subtract, multiply and divide decimals up to three decimal places
SoS11. Understand and calculate using ratios, direct proportion and inverse proportion	SoS12. Follow the order of precedence of operators, including indices

Use of common measures, shape and space: Learners at Level 2 are expected to be able to:

- handle relationships between measurements of various kinds
- use angles and co-ordinates when describing position and direction
- make use of geometric properties in calculations with 2-D and 3-D shapes, and understand the relationships between them

Level 2 - Using common measures, shape and space	
SoS13. Calculate amounts of money, compound interest, percentage increases, decreases and discounts including tax and simple budgeting	SoS14. Convert, using a conversion factor and conversion graph, between metric and imperial units of length, weight and capacity
SoS15. Calculate using compound measures including speed, density and rates of pay	SoS16. Calculate perimeters and areas of 2-D shapes including triangles and circles and composite shapes including non-rectangular shapes (formulae given except for triangles and circles)
SoS17. Use formulae to find volumes and surface areas of 3-D shapes including cylinders (formulae to be given for 3-D shapes other than cylinders)	SoS18. Calculate actual dimensions from scale drawings and create a scale diagram given actual measurements
SoS19. Use coordinates in 2-D, positive and negative, to specify the positions of points	SoS20. Understand and use common 2-D representations of 3-D objects
SoS21. Draw 3-D shapes to include plans and elevations	SoS22. Calculate values of angles and/or coordinates with 2-D and 3-D shapes

Handle information and data: learners at Level 2 are expected to be able to:

- construct, interpret and evaluate a range of statistical diagrams
- calculate and interpret probabilities
- calculate, analyse, compare and interpret appropriate:
    - data sets
    - tables
    - diagrams
    - statistical measures such as common averages (mean, median, mode) and spread (range)
- use statistics to compare 2 sets of data
- identify patterns and trends from data
- recognise simple correlation

Level 2 - Handling information and data
SoS23. Calculate the median and mode of a set of quantities
SoS24. Estimate the mean of a grouped frequency distribution from discrete data
SoS25. Use the mean, median, mode and range to compare two sets of data
SoS26. Work out the probability of combined events, using diagrams and tables, including two-way tables
SoS27. Express probabilities as fractions, decimals and percentages
SoS28. Draw and interpret scatter diagrams and recognise positive and negative correlation

Solving mathematical problems and decision making

Learners at Level 2 are expected to be able to use the knowledge and skills set out in the subject content section to:

- recognise a complex mathematical problem
- obtain a solution or solutions

A complex mathematical problem is one that requires:

- a multi-step process
- planning and working through at least 2 connected steps or processes

Individual problems are based on a combination of the knowledge and skills from the mathematical content areas:

- number and the number system
- common measures, shape and space
- information and data

At Level 2, it is expected that the student will be able to address individual problems, some of which draw on a combination of all 3 content areas and require students to make connections between them.

Learners at Level 2 are expected to be able to:

- read, understand and use mathematical information and terms
- address individual problems as described
- use knowledge and understanding to a required level of accuracy

- identify suitable operations and calculations to generate results
- analyse and interpret results in the context of the original problem
- check the sense and reasonableness of answers
- present and explain results clearly and accurately, demonstrating reasoning to support the process, and show consistency with the evidence presented

The context of individual problems at this level will require interpretation and analysis in order for the student to be able to independently identify and carry out an appropriate mathematical process or processes.

Attributes, of which one or more may be present in a single task to consider it as problem solving, are listed below:

A. Tasks that have little or no scaffolding: there is little guidance given to the learner beyond a start point and a finish point. Questions do not explicitly state the mathematical process (es) required for the solution.
B. Tasks that provide for multiple representations, such as the use of a sketch or a diagram as well as calculations.
C. The information is not given in mathematical form or in mathematical language; or there is a need for the results to be interpreted or methods evaluated, for example, in a real-world context.
D. Tasks have a variety of techniques that could be used.
E. The solution requires understanding of the processes involved rather than just application of the techniques.
F. The task requires two or more mathematical processes or may require different parts of mathematics to be brought together to reach a solution.

Delivering this Qualification

Becoming a Provider

To deliver this qualification you must be a recognised Open Awards Provider. For more information, head to our website or contact the team on 0151 494 2072.

How to Deliver

To request to deliver this qualification, please login to the Portal and then click on 'Tracking' and 'Initiate a Workflow'. You will then need to select 'Apply to Deliver Functional Skills'.

For support with this process, please see the following document in the Portal 'Provider Portal Guidance – Qualification Approval' or contact the team on customerservices@openawards.org.uk or 0151 494 2072.

Registering Learners

Once you are ready to deliver this qualification, you will need to register your learners in line with the timescales below:

Short courses (15 weeks or less) within 25 working days of the course start date.
Long courses (over 15 weeks) within 60 working days of the course start date.

You will need to register your learners via the Portal.

Please ensure all learner details are provided to avoid delays to your learner registrations being processed. Learner Registrations Forms can be submitted by the Provider Admin Contact. If an end-date for the course is not provided, the Functional Skills registration will last for a period of two years.

Once your learners are registered, you will be able to schedule assessments via the XAMS assessment platform.

Identification and Learner Authenticity Identification Requirements

Providers must have systems in place to ensure that an individual completing an assessment is the person they are claiming to be.

It is a provider's responsibility to confirm the identity of a learner as part of its registration process. You may do this by requesting sufficient personal data and a unique learner number (ULN) to ensure the learner can be clearly and uniquely identified.

The use of a ULN is a mandatory requirement for publicly funded education and when submitting Individualised Learner Record (ILR) returns.

Providers are required to ensure that each learner's identification is checked and that the type of identification provided by each learner is recorded before assessments are undertaken. Open Awards' Quality Assurance team will check this record during quality assurance monitoring activities.

The following are permitted proof of a learner's Identity:

- a valid passport (any nationality);
- signed UK photo card driving licence;
- valid warrant card issued by HM Forces or the Police;
- other photographic ID card, e.g. employee ID card (must be current employer), student ID card, travel card; OR
- UK biometric residence permit.

If an assessment is taking place in a learner's place of work and a learner is unable to supply any of the above, authentication of a learner's identity by a third-party representative, for example his/her line manager or a member of his/her workplace Human Resources Team can be accepted.

Scheduling Assessments

Learners must be registered in accordance with Open Awards policy prior to scheduling learners for a Functional Skills assessment.

Once the learner has been registered, their assessments can be scheduled via the XAMS assessment platform.

Providers can set their own dates/ times for assessments.

For on-screen assessments, providers can schedule up to two (2) hours before the set assessment date/time. The assessment will be available for the learner to sit at any time on the scheduled date via the XAMS assessment platform (i.e., 12 hours before or after the scheduled time).

For paper-based assessments, providers can schedule up to 10 working days before the set assessment date/time. The paper-based assessment can be sat on any day, as long as there has been 10 working days notification of the assessment. Paper-based assessments will be sent to the provider by Open Awards a minimum of 48 hours before the scheduled assessment.

Once the papers have been sat, providers are required to return them via Tracked Delivery with signature (24 hours) to Open Awards Head Office within 24 hours. This includes any papers that have not been sat by a learner for any reason.

A calendar of results dates for paper-based assessments is published at the beginning of each academic year on our website.

Please see our XAMS User Guidance on the Portal for further information.

Once scheduled, you cannot change the date or time of the assessment. Providers can, however, withdraw the learner from the scheduled assessment and re-schedule within the timescales outlined above.

Quality Assurance and Standardisation

Delivery of this qualification must be done so in accordance with Ofqual regulatory guidelines and in line with Open Awards' quality assurance processes. Please see our website for more information.

Provider Staff Requirements

Providers are responsible for ensuring that their staff are occupationally competent and have access to appropriate training and support. They are also responsible for promptly notifying Open Awards of staff changes.

To deliver our Functional Skills qualifications, Open Awards expect that you have appropriate staff in place to fulfil the following essential roles:

- Tutor/ Teacher
- Internal Quality Assurer
- Invigilator
- Assessment administrator

These roles must be covered by a minimum of 2 separate individuals to avoid potential or actual conflicts of interest. For more information, please see our Conflicts of Interest Policy available on the Portal.

In addition, it is Open Awards expectation that staff at providers meet the following minimum requirement:

- Tutors have relevant teaching experience and/or a qualification, and experience and/or a qualification in the relevant subject area, as a minimum at a level above that being taught
- For the role of the administrator, providers must ensure that the confidentiality and security of assessments is maintained at all times.

Administration includes initial receipt of confidential materials, secure storage, movement and preparation of materials for scheduled assessments, and registration, secure storage and return of materials to the awarding organisation after scheduled assessments are completed.

No tutor of a Functional Skills qualification can be involved in the invigilation or administration of the assessment materials for Level One (1) and Two (2) assessments in that subject, regardless of the level they teach. Nobody with a vested interest in the outcome of the assessment may be involved in the administration or invigilation.

For the role of Invigilator, staff will be required to complete Open Awards' online training before the first assessment, with a refresher annually.

External Assessment

Assessment of Level 2 Functional Skills in Mathematics is through an externally set and marked assessment, comprising of a calculator and non-calculator section. This assessment can be completed on-screen (on-screen and on-demand) or paper-based

Practice assessments are provided in both modes of delivery (on-screen or paper-based), and providers should ensure learners have access to these in advance of sitting their assessment to familiarise themselves with the format. For on-screen assessments, there are additional demonstration questions available via the Portal to enable learners to get used to the different question types and functionality that may appear in their assessments e.g., drawing shapes, graphs and on-screen protractors.

Providers must ensure that assessments are carried out in controlled conditions to minimise the potential for plagiarism and to ensure security of the assessment materials. In order to ensure these conditions are enforced, external assessments must be delivered in accordance with our policy, Instructions for Conducting Controlled Assessments or Instructions for Conducting Controlled Assessments Remotely, available on the Portal.

Open Awards permits remote invigilation of Functional Skills assessments. Providers must apply in advance of the first assessment via the Portal if they intend to administer assessments remotely. Open Awards also provides a remote invigilation service. Open Awards invigilated assessments can be scheduled via the XAMS assessment platform by choosing this option from the drop-down. Prices associated with utilising Open Awards' invigilators are published in our Pricing Information on the Open Awards website.

Invigilator reports must be completed for every assessment and retained in line with Open Awards' Instructions for Conducting Controlled Assessments (Remotely) and made available to Open Awards external quality assurance team on request. Invigilators are responsible for ensuring that learners do not have access to calculators for Part A of the scheduled assessment, and that, for paper-based assessments, all Part A scripts are returned before issuing Part B.

Providers must ensure that there are no conflicts of interest between the invigilator and learners by checking in advance of the assessment. The invigilator(s) must not be a Functional Skills tutor for the same subject the learner, or group of learners, is undertaking the assessment for. The only exception to this is where it is required as a reasonable adjustment for a learner with specific support needs. In this case, a request for a reasonable adjustment should be made to Open Awards in advance of the assessment.

Once completed, paper-based external assessments must be returned to Open Awards by Tracked and Signed 24 hours postage service. This includes any scripts that were not attempted due to learner absence. For full guidance on returning completed and blank scripts, please refer to the instructions provided to providers with the assessment papers.

Storing Confidential Materials

Question papers and any other confidential material e.g. answer booklets, must be stored securely at the provider's registered address in a safe and secure lockable cupboard/cabinet with restricted access in a secure locked room. The contents of all materials must be treated as strictly confidential and should not be shared with anyone other than those taking or administering the assessment. Copies may not be issued to anyone, including teaching staff. Open Awards must be notified immediately if any known or suspected infringement of these conditions takes place by calling 0151 494 2072 or emailing quality@openawards.org.uk. Should the provider be found responsible for compromising the security of the assessment then we will invoke our Sanctions Policy and the provider they may be charged for redevelopment costs.

External Quality Assurance

Providers are allocated a Quality and Standards Advisor (QASA) who will lead the external quality assurance activities.

External quality assurance includes, but is not limited to, the following activity:

- Observations of live assessments
- Annual Functional Skills Risk Rating Review
- Quality compliance visits/activity
- Unannounced visits and spot checks
- Checks of policies and procedures
- Feedback from staff and learners.

Provider monitoring will:

- ensure the Provider is taking all reasonable steps to prevent the occurrence of malpractice or maladministration
- confirm that invigilation is conducted by appropriately experienced individuals and subject to ongoing monitoring

Open Awards adopts a risk-based approach for monitoring all approved Providers, which identifies and justifies the number and frequency of external quality assurance monitoring visits required based on the Provider's performance. The risk-based sampling approach adopted uses a RAG rating matrix and is utilised across the delivery of Functional Skills.

Provider Monitoring

Providers delivering Functional Skills Maths at Levels One (1) and Two (2) will receive, as a minimum, an annual review of their Functional Skills Risk Rating.. This will include a check of policies, procedures and controls for ensuring the provider undertakes the delivery, invigilation and administration of assessments in line with guidance and policies provided.

Providers are required to schedule all assessments to enable Open Awards to complete observations of on-screen and online assessments, unannounced visits and spot checks.

Further guidance on training and support is available, please speak to your Open Awards' Quality and Standards Advisor.

Unannounced and Short-notice Visits

Open Awards operates a system of unannounced and short-notice visits to ensure that providers are complying with the rules set out within this specification, and associated policies, around the delivery of assessments. These visits ensure ongoing confidence in the qualification as well as maintaining and improving quality and standards. Such checks will create the opportunity to comment on good practice and to identify areas for improvement.

Guidance on unannounced and short-notice visits is available via the Portal.

Training and support

Guidance and support to providers is available as part of the regular external quality assurance monitoring visit, as well as provided throughout the year via training sessions, workshops and networking events.

Open Awards offers a variety of training and support to Providers. Our online training and support is free of charge and can be accessed on the following link https://oalearn.org.uk/shop. An everlasting coupon (PLUC code) will be issued to each Provider to gain free access to these resources.

External Marking and Results

All external assessments are marked by qualified Open Awards markers.

Standardisation and marker checks are carried out regularly to ensure quality of marking. This includes second-marking and sampling by a Lead Marker in line with Open Awards sampling policy.

Following completion of the marking process, learners' results will be available to the provider through the XAMS assessment platform.

Results for on-screen assessments will be available within a maximum of 10 working days from the date the assessment was taken and within 32 working days for paper-based assessments.

For newly released assessment versions, the maximum time a provider/ learner will wait for results to be issued is 32 working days. This additional time is to allow for the awarding process where specific pass marks are set for each assessment version.

For mathematics assessments, learners will receive a feedback report on their performance against the subject content that was assessed. This is available for providers to download via the results screen in the XAMS assessment platform.

Resits

Learners are permitted to resit an external assessment where they are issued a fail result. Resit charges will apply.

Providers are responsible for preparing their learners for the assessment and should ensure that the approach to resits is appropriate. Learners should be discouraged from repeated resits and be provided with further teaching and learning to support successful achievement of the qualifications where learners have not passed the assessment.

Learners can be scheduled for a resit in the XAMS platform within the standard timeframes, provided the necessary further learning has taken place. This is to ensure that learners receive further teaching and learning and that they are fully prepared for the resit.

Please note, providers should not re-schedule an assessment until results have been received and it is confirmed that a learner has failed an assessment attempt.

If a learner has had three (3) attempts and not yet passed, please contact us on 0151 494 2072 or quality@openawards.org.uk to discuss this with the Quality Assurance team before scheduling a fourth attempt.

Enquiries and Appeals

Providers and learners have the right to appeal against the results issued. Providers must ensure that learners are made aware of this.

There are three stages of appeal depending on the nature of the decision at each stage:

- Enquiry (Stage 1)
- Appeal (Stage 2)
- Independent Appeals Review (Stage 3)

Each stage must be completed before progressing to the next stage. More information can be found in Open Awards Policy for Enquiries and Appeals found on our website.

Open Awards offers training and standardisation events that are held throughout the year. Such events will also provide an opportunity to identify and share best practice. Up to date details of training and standardisation events can be found on our website.

Reasonable Adjustments and Special Considerations

Open Awards is committed to ensuring the rights of individual learners to access qualifications, units and assessments in a way most appropriate for their individual needs and to enable them to demonstrate their achievements. At the same time, we are committed to ensuring that the integrity of our qualifications, units and assessment is maintained at all times.

Open Awards encourages Providers to adopt, at all times, inclusive assessment processes that adhere to disability and equal opportunity legislation and other regulatory criteria without compromising standards of assessment or giving any unfair advantage over other learners. We ensure that our Providers consider a variety of suitable assessment methods as good practice, taking into consideration its learners. In cases where a qualification is inaccessible because of a learner's inability to demonstrate competence in all units of the qualification, credit will be awarded for all units for which competence has been demonstrated.

Open Awards treats all records of reasonable adjustments and special consideration requests and agreements in confidence. Different types of assessment make different demands on learners and will influence whether reasonable adjustments will be needed with the kind of suitable reasonable adjustments which may be put in place.

The adjustments that are appropriate for a particular assessment will depend upon:

- the specific assessment demands for the qualification/unit
- the type of assessment
- the particular needs and circumstances of the individual learner.

In situations where the learner is given set assessment materials and must complete the task in a fixed amount of time, there may be a greater need for adjustments to standard assessment arrangements in order to give access. In such instances, Providers must obtain approval from Open Awards before the assessment is planned to take place.

Open Awards' policy for reasonable adjustments and special considerations can be found on our website here.

Malpractice, Maladministration and Incident Management

Open Awards is committed to ensuring access to fair assessment for all learners and to protecting the integrity of the award of credit and qualifications. Our policy and procedures define malpractice and maladministration, clarifies the roles and responsibilities of Providers, learners and Open Awards, and outlines the procedures that will be followed when there are issues of suspected malpractice or maladministration within a Provider.

The purpose of the policy is to ensure that:

- potential malpractice and maladministration is identified, prevented, corrected and/or mitigated
- any event that could lead to an Adverse Effect is identified, prevented, corrected and/or mitigated.

The full Policy and Procedure can be found on our website here.

Open Awards Level 2 Functional Skills Qualification in Mathematics Setting Specification

Learning aims and outcomes	Scope of Study	Task Coverage	Problem solving	Underpinning skills	Task details	Assessment structure and timings
Demonstrate mathematical skills to solve realistic problems of increasing complexity through reasoning and decision making. **Familiarise self with concepts and problems that apply to life and work.** **Understand the role played by mathematics in the world of work and in life generally.**	SoS1. Read, write, order and compare positive and negative numbers of any size SoS2. Carry out calculations with numbers up to one million including strategies to check answers including estimation and approximation SoS3. Evaluate expressions and make substitutions in given formulae in words and symbols SoS4. Identify and know the equivalence between fractions, decimals and percentages SoS5. Work out percentages of amounts and express one amount as a percentage of another SoS6. Calculate percentage change (any size increase and decrease), and original value after percentage change SoS7. Order, add, subtract and compare amounts or quantities using proper and improper fractions and mixed numbers SoS8. Express one number as a fraction of another SoS9. Order, approximate and compare decimals SoS10. Add, subtract, multiply and divide decimals up to three decimal places SoS11. Understand and calculate using ratios, direct proportion and inverse proportion SoS12. Follow the order of precedence of operators, including indices SoS13. Calculate amounts of money, compound interest, percentage increases, decreases and discounts including tax and simple budgeting SoS14. Convert between metric and imperial units of length, weight and capacity using a) a conversion factor and b) a conversion graph SoS15. Calculate using compound measures including speed, density and rates of pay SoS16. Calculate perimeters and areas of 2-D shapes including triangles and circles and composite shapes including non-rectangular shapes (formulae given except for triangles and circles) SoS17. Use formulae to find volumes and surface areas of 3-D shapes including cylinders (formulae to be given for 3-D shapes other than cylinders) SoS18. Calculate actual dimensions from scale drawings and create a scale diagram given actual measurements SoS19. Use coordinates in 2-D, positive and negative, to specify the positions of points SoS20. Understand and use common 2-D representations of 3-D objects SoS21. Draw 3-D shapes to include plans and elevations SoS22. Calculate values of angles and/or coordinates with 2-D and 3-D shapes SoS23. Calculate the median and mode of a set of quantities SoS24. Estimate the mean of a grouped frequency distribution from discrete data SoS25. Use the mean, median, mode and range to compare two sets of data SoS26. Work out the probability of combined events including the use of diagrams and tables, including two-way tables SoS27. Express probabilities as fractions, decimals and percentages SoS28. Draw and interpret scatter diagrams and recognise positive and negative correlation	**Task 1** Sample of SoS	9 marks	6 marks	No calculator permitted/online calculator disabled	**Section A** 30 minutes
		Task 2 Sample of SoS	12 marks	3 marks	Non-scientific calculator allowed/ enabled	**Section B** 90 minutes
		Task 3 Sample of SoS	12 marks	3 marks	Non-scientific calculator allowed/ enabled	
		Task 4 Sample of SoS	12 marks	3 marks	Non-scientific calculator allowed/ enabled	

Appendices and Links

The following documents can be viewed on the Open Awards website:

1. Complaints Policy
2. Enquiriesand Appeals Policy
3. Academic Misconduct Policy
4. Equality,Diversity and Inclusion Policy
5. Reasonable Adjustment and Special Considerations Policy
6. Invoicing Policy
7. Privacy Policy
8. Provider Handbook (Regulated Qualifications and Unit Courses)

Further supporting information, including additional practice papers, can be found on the Portal.

Page left intentionally blank

Open Awards
17 De Havilland Drive,
Estuary Commerce Park
Speke
Liverpool
L24 8N
0151 494 2072
enquiries@openawards.org.uk
www.openawards.org.uk
@openawards