Awards in Number and Measure

Specification

Edexcel Level 1 Award in Number and Measure (ANM10)

Edexcel Level 2 Award in Number and Measure (ANM20)

For first teaching from September 2011

Issue 3
Pearson Education Ltd is one of the UK’s largest awarding organisations, offering academic and vocational qualifications and testing to schools, colleges, employers and other places of learning, both in the UK and internationally. Qualifications offered include GCSE, AS and A Level, NVQ and our BTEC suite of vocational qualifications, ranging from Entry Level to BTEC Higher National Diplomas. Pearson Education Ltd administers work-based qualifications.

Through initiatives such as onscreen marking and administration, Pearson is leading the way in using technology to modernise educational assessment, and to support teachers and learners.

This specification is Issue 3. Key changes are sidelined. We will inform centres of any changes to this issue. The latest issue can be found on the Edexcel website: www.edexcel.com

Acknowledgements

This specification has been produced by Edexcel on the basis of consultation with teachers, examiners, consultants and other interested parties. Edexcel would like to thank all those who contributed their time and expertise to its development.

References to third party material made in this specification are made in good faith. We do not endorse, approve or accept responsibility for the content of materials, which may be subject to change, or any opinions expressed therein. (Material may include textbooks, journals, magazines and other publications and websites.)

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Prepared by Ali Melville

Publications Code W035165

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Introduction

The Edexcel Level 1 and Level 2 Awards in Number and Measure are designed for use in schools and colleges. They are part of a suite of mathematics qualifications offered by Edexcel.

Key subject aims

The Edexcel Level 1 and Level 2 Awards in Number and Measure qualifications enable students to:

- develop a thorough knowledge and understanding of concepts in number and measure and a sound foundation of mathematical techniques
- acquire confidence in their mathematical skills to move into further study in the subject or related areas
- enjoy using mathematics, and become confident when using mathematics
- develop a proficiency in number and measures to support progression in their studies, the workplace and training.

Key features and benefits of the specification

Key features and benefits are:

- two levels of demand which allow students to be assessed appropriately
- clear progression from Level 1 to Level 2
- questions designed to be accessible to students of all abilities for that level
- papers that are balanced for topics and difficulty
- papers that assess a thorough range of topics within the specification
- support for other Level 1 and Level 2 qualifications, such as GCSE, Functional Skills or BTEC
- provision of mathematical proficiency for other subjects, such as business and science
- teacher support and assessment guidance available.
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Specification at a glance

These Level 1 and Level 2 Awards qualifications consist of a single assessment at each level.

- Students are entered at either Level 1 or Level 2.
- Each assessment consists of two sections.
- Each award is pass or fail.

<table>
<thead>
<tr>
<th>Level 1</th>
<th>Paper code: ANM10</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Externally assessed</td>
<td></td>
</tr>
<tr>
<td>• Availability: January and June series</td>
<td></td>
</tr>
<tr>
<td>• First assessment: June 2012</td>
<td></td>
</tr>
<tr>
<td>• Two sections: A and B.</td>
<td></td>
</tr>
</tbody>
</table>

Overview of content

- Number
- Measures
- Charts and graphs.

Overview of assessment

- The award is assessed through a 1 hour 30 minutes examination set and marked by Edexcel.
- The total number of marks for the paper is 80.
- The award is pass or fail.
- The paper is split into two sections: Section A, which lasts for 1 hour and has 50 marks and Section B, which lasts for 30 minutes and has 30 marks.
- Section A and Section B are presented as separate question and answer booklets, and must be taken in the same examination session.
- Section A is calculator allowed, and Section B is non-calculator. Calculators are handed in at the end of the first hour of the examination.
Level 2

- Externally assessed
- Availability: January and June series
- First assessment: June 2012
- Two sections: A and B

Overview of content
- Number
- Measures
- Charts and graphs

Overview of assessment
- The award is assessed through a 1 hour 30 minutes examination set and marked by Edexcel.
- The total number of marks for the paper is 80.
- The award is pass or fail.
- The paper is split into two sections: Section A, which lasts for 1 hour and has 50 marks and Section B, which lasts for 30 minutes and has 30 marks.
- Section A and Section B are presented as separate question and answer booklets, and must be taken in the same examination session.
- Section A is calculator allowed, and Section B is non-calculator. Calculators are handed in at the end of the first hour of the examination.

External assessment

In all examination papers:
- diagrams will not necessarily be drawn to scale and measurements should not be taken from diagrams unless instructions to this effect are given
- each student may be required to use mathematical instruments, eg ruler and protractor
- calculators may be used for Section A.
Calculators

Students will be expected to have access to a suitable electronic calculator for Section A. The use of a calculator is permitted in Section A of the assessment. Students will be expected to know how to use estimation to evaluate approximations to numerical calculations, and to show the appropriate stages of their working out.

The electronic calculator to be used by students attempting the Level 1 examination paper should have these functions as a minimum:

- $+$, $-$, $\times$, $\div$, memory, brackets.

The electronic calculator to be used by students attempting the Level 2 examination paper should have these functions as a minimum:

- $+$, $-$, $\times$, $\div$, $x^2$, $\sqrt{}$, memory, brackets

Calculators with any of the following facilities are prohibited in all examinations:

- databanks; retrieval of text or formulae; QWERTY keyboards; built-in symbolic algebra manipulations; symbolic differentiation or integration.

The assessment of the Level 1 and Level 2 Awards in Number and Measure contains a calculator section and a non-calculator section. Both sections are taken in one examination session.

The two sections are presented in separate question and answer booklets. The sections are handed out at different times during the examination.

The learners spend the first hour of the examination working through the calculator section. Calculators are then put away, or collected in by invigilators, and the examination continues with the non-calculator section of the paper, for the remaining 30 minutes.

Candidates have access to both sections of the examination during the non-calculator assessment period.
Qualification content

National Qualifications framework (NQF)

These qualifications comply with the requirements of the statutory regulation of qualifications in England, Wales and Northern Ireland which are prescribed by the regulatory authorities.

Knowledge, skills and understanding

The Edexcel Level 1 and Level 2 Awards in Number and Measure require students to demonstrate application and understanding of the following.

1. Integers
2. Decimals
3. Approximation
4. Fractions
5. Percentages
6. Ratio and proportion (Level 2 only)
7. Money
8. Time
9. Measures
10. Area and Perimeter
11. Volume
12. Tables and Charts

Assessment overview

- One written paper taken at the end of the course.
- The paper is assessed through two sections: Section A, which lasts for 1 hour and has 50 marks, and Section B, which lasts for 30 minutes and has 30 marks.
- The paper is a 1 hour 30 minutes examination, which is set and marked by Edexcel.
- The total number of marks for the paper is 80.
- Each award is pass or fail.
Edexcel Level 1 Award in Number and Measure

Overview

Content overview

This qualification contains:

1. Integers
2. Decimals
3. Approximation
4. Fractions
5. Percentages
6. Money
7. Time
8. Measures
9. Area and Perimeter
10. Volume
11. Tables and Charts

Assessment overview

- One written paper with two sections
- The paper contains 80 marks in total
- Duration: 1 hour 30 minutes in total
- Section A: Calculator, 50 marks, 60 minutes
- Section B: Non-calculator, 30 marks, 30 minutes
- Pass or fail only
- Available in January and June
- First assessment: June 2012
## Level 1

### What students need to learn:

<table>
<thead>
<tr>
<th>Topic</th>
<th>Concepts and skills</th>
</tr>
</thead>
</table>
| **1. Integers** | 1. Read, write, order and compare positive integers up to 1000  
2. Add and subtract positive integers  
3. Multiply and divide positive integers by 10, 100 and 1000  
4. Multiply and divide by positive integers (single digit multiplier and divisor for non-calculator section)  
5. Know multiplication and division facts up to $10 \times 10$  
6. Round positive integers to the nearest 10, 100 and 1000  
7. Understand and use multiples, factors, common factors and understand prime numbers  
8. Understand negative numbers and use a number line to order, add and subtract negative numbers |
| **2. Decimals** | 1. Read, write, order and compare decimals up to two decimal places, and understand place value  
2. Add and subtract decimals up to two decimal places  
3. Multiply decimals with up to two decimal places (single digit whole number multiplier for non-calculator section)  
4. Divide decimals with up to two decimal places, using a calculator  
5. Round decimals to one decimal place and the nearest integer, and round money in calculations to the nearest penny |
<table>
<thead>
<tr>
<th>Topic</th>
<th>Concepts and skills</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>3. Approximation</strong></td>
<td>1. Check solutions to questions and problems by considering whether the answer is sensible</td>
</tr>
</tbody>
</table>
| **4. Fractions** | 1. Read, write, order and compare fractions and mixed numbers  
2. Use equivalent fractions  
3. Write fractions in their simplest form  
4. Convert simple fractions to decimals (up to 2 decimal places) and vice versa  
   eg $\frac{1}{2}, \frac{1}{4}, \frac{1}{5}, \frac{1}{10}$ and multiples of these fractions  
5. Add and subtract simple fractions (with the same denominator, excluding mixed fractions)  
6. Multiply a fraction by a positive integer, and find a fraction of a whole number quantity (positive integers only) |
| **5. Percentages** | 1. Read, write, order and compare simple percentages, eg 10%, 25%, 20%, 50% and 75%  
2. Use equivalencies between decimals, fractions and percentages  
   eg $25\% = \frac{1}{4} = 0.25$  
3. Work out simple percentages of quantities, including VAT |
| **6. Money** | 1. Read, write, order and compare money  
2. Add, subtract, multiply and divide quantities of money, household finance, utility bills, shopping bills, interest (for 1 year) |
<table>
<thead>
<tr>
<th>Topic</th>
<th>Concepts and skills</th>
</tr>
</thead>
</table>
| **7. Time** | 1. Read, measure and record time using digital and analogue clocks in 12-hour and 24-hour format  
|             | 2. Use units of time including seconds, minutes, hours, days, weeks, months and years  
|             | 3. Work out intervals of time and convert between units of time                       
|             | 4. Read, measure and record events on calendars                                       |
| **8. Measures** | 1. Know and use units of measure for length, weight, angles, capacity, temperature, including metric and imperial units eg imperial units include miles, inches, feet, pounds, gallons and pints  
|             | 2. Add and subtract units of measure                                                  
|             | 3. Convert units of measure in the metric system                                       
|             | 4. Read integer scales                                                                 
|             | 5. Draw and measure lines and angles, accurate to the nearest cm and degree           |
| **9. Area & Perimeter** | 1. Work out the perimeter of rectangles and shapes made from rectangles          
|             | 2. Work out the area of rectangles and shapes made from rectangles                   |
| **10. Volume** | 1. Work out the volume of a cuboid                                                   |
| **11. Tables & Charts** | 1. Read, construct and use everyday tables and charts, eg mileage charts, bar charts, line graphs, currency conversion tables and timetables (bus, train and airlines). |
Edexcel Level 2 Award in Number and Measure

Overview

Content overview

This qualification contains:

1. Integers
2. Decimals
3. Approximation
4. Fractions
5. Percentages
6. Ratio and Proportion
7. Money
8. Time
9. Measures
10. Area and Perimeter
11. Volume
12. Tables and Charts

Assessment overview

- One written paper with two sections
- The paper contains 80 marks in total
- Duration: 1 hour 30 minutes in total
- Section A: Calculator, 50 marks, 60 minutes
- Section B: Non-calculator, 30 marks, 30 minutes
- Pass or fail only
- Available in January and June
- First assessment: June 2012
# Level 2

**What students need to learn:**

<table>
<thead>
<tr>
<th>Topic</th>
<th>Concepts and skills</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Integers</strong></td>
<td>1. Read, write, order and compare positive integers up to 1000</td>
</tr>
<tr>
<td></td>
<td>2. Add and subtract positive integers</td>
</tr>
<tr>
<td></td>
<td>3. Multiply and divide positive integers by 10, 100, 1000</td>
</tr>
<tr>
<td></td>
<td>4. Multiply and divide positive integers (single digit multiplier and divisor for non-calculator section)</td>
</tr>
<tr>
<td></td>
<td>5. Know multiplication and division facts up to $10 \times 10$</td>
</tr>
<tr>
<td></td>
<td>6. Round positive integers to the nearest 10, 100 and 1000</td>
</tr>
<tr>
<td></td>
<td>7. Understand and use multiples, factors, common factors and prime numbers</td>
</tr>
<tr>
<td></td>
<td>8. Understand negative numbers and use a number line to order, add and subtract negative numbers</td>
</tr>
<tr>
<td></td>
<td>9. Read, write, order and compare positive and negative integers of any size</td>
</tr>
<tr>
<td></td>
<td>10. Add, subtract, multiply and divide integers of any size</td>
</tr>
<tr>
<td></td>
<td>11. Multiply and divide using negative integers</td>
</tr>
<tr>
<td></td>
<td>12. Find the Highest Common Factor and Lowest Common Multiple of any two positive integers</td>
</tr>
<tr>
<td></td>
<td>13. Read, write and use squares, cubes and square roots</td>
</tr>
<tr>
<td></td>
<td>14. Read, write and use index notation for small positive integer powers</td>
</tr>
</tbody>
</table>

Level 1 content is shown in *italics*. Level 2 content is shown in **bold**.
<table>
<thead>
<tr>
<th><strong>Topic</strong></th>
<th><strong>Concepts and skills</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2. Decimals</strong></td>
<td>1. Read, write, order and compare decimals up to two decimal places and understand place value</td>
</tr>
<tr>
<td></td>
<td>2. Add and subtract decimals up to two decimal places</td>
</tr>
<tr>
<td></td>
<td>3. Multiply decimals with up to two decimal places (single digit whole number multiplier for non-calculator section)</td>
</tr>
<tr>
<td></td>
<td>4. Divide decimals with up to two decimal places, using a calculator</td>
</tr>
<tr>
<td></td>
<td>5. Multiply decimals with up to two decimal places (two digit multiplier and divisor for non-calculator section)</td>
</tr>
<tr>
<td></td>
<td>6. Round decimals to two decimal places</td>
</tr>
<tr>
<td></td>
<td>7. Add and subtract any decimal</td>
</tr>
<tr>
<td><strong>3. Approximation</strong></td>
<td>1. Check solutions to questions and problems by considering whether the answer is sensible</td>
</tr>
<tr>
<td></td>
<td>2. Check solutions to questions and problems by using suitable approximations</td>
</tr>
</tbody>
</table>

Level 1 content is shown in *italics*. Level 2 content is shown in **bold**.
<table>
<thead>
<tr>
<th>Topic</th>
<th>Concepts and skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Fractions</td>
<td>1. Read, write, order and compare fractions and mixed numbers</td>
</tr>
<tr>
<td></td>
<td>2. Use equivalent fractions</td>
</tr>
<tr>
<td></td>
<td>3. Write fractions in their simplest form</td>
</tr>
<tr>
<td></td>
<td>4. Convert simple fractions to decimals (up to 2 decimal places) and vice versa</td>
</tr>
<tr>
<td></td>
<td>eg $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{1}{10}$ and multiples of</td>
</tr>
<tr>
<td></td>
<td>these fractions</td>
</tr>
<tr>
<td></td>
<td>5. Add and subtract simple fractions with the same denominator, excluding mixed numbers</td>
</tr>
<tr>
<td></td>
<td>6. Multiply a fraction by a positive integer, and find a fraction of a whole number quantity (positive integers only)</td>
</tr>
<tr>
<td></td>
<td>7. Multiply fractions, including mixed numbers</td>
</tr>
<tr>
<td></td>
<td>8. Divide fractions, including mixed numbers, using a calculator</td>
</tr>
<tr>
<td></td>
<td>9. Add and subtract fractions with different denominators and mixed numbers</td>
</tr>
<tr>
<td></td>
<td>10. Use fractions to compare quantities</td>
</tr>
<tr>
<td></td>
<td>11. Express one number as a fraction of another</td>
</tr>
</tbody>
</table>

Level 1 content is shown in *italics*.  
Level 2 content is shown in **bold**.
<table>
<thead>
<tr>
<th>Topic</th>
<th>Concepts and skills</th>
</tr>
</thead>
</table>
| 5. Percentages | 1. Read, write, order and compare simple percentages  
2. Use equivalencies between decimals (up to 2 decimal places) fractions and percentages  
\[ \text{eg } 25\% = \frac{1}{4} = 0.25 \]  
3. Work out percentages of quantities, including VAT  
4. Find percentages of quantities of any value  
5. Calculate percentage increase and decrease  
6. Express one number as a percentage of another |
| 6. Ratio & Proportion | 1. Use direct proportion in simple problems  
2. Use ratio notation  
3. Divide a quantity into 2 or 3 parts in a given ratio |
| 7. Money | 1. Read, write, order and compare money  
2. Round money in calculations to the nearest penny  
3. Add, subtract, multiply and divide quantities of money, household finance, utility bills, shopping bills, interest (for 1 year)  
4. Convert between currencies  
5. Calculate simple interest  
6. Calculate wages and salaries, including national insurance and tax deductions |

Level 1 content is shown in *italics*.  
Level 2 content is shown in **bold**.
<table>
<thead>
<tr>
<th>Topic</th>
<th>Concepts and skills</th>
</tr>
</thead>
</table>
| 8. Time | 1. *Read, measure and record time using digital and analogue clocks in 12-hour and 24-hour format*  
| | 2. *Convert units of time including seconds, minutes, hours, days, weeks, months and years*  
| | 3. *Work out intervals of time*  
| | 4. *Read, measure and record events on calendars* |

Level 1 content is shown in *italics*.  
Level 2 content is shown in **bold**.
<table>
<thead>
<tr>
<th>Topic</th>
<th>Concepts and skills</th>
</tr>
</thead>
</table>
| **9. Measures** | 1. Know and use units of measure for length, weight, angles, capacity, temperature, including metric and imperial units and degrees  
  eg imperial units include miles, inches, feet, pounds, gallons and pints  
  2. Add and subtract measures  
  3. Convert units of measure in its same systems  
  4. Read integer scales  
  5. Draw lines and angles, accurate to the nearest cm and degree  
  6. Read decimal scales  
  7. Convert between metric and imperial units  
  eg 5 miles = 8 km  
  12 inches = 1 foot = 30 cm  
  2.2 pounds = 1 kg  
  8 pints = 1 gallon = 4.5 litres |
| **10. Area & Perimeter** | 1. Work out the perimeter of rectangles and shapes made from rectangles  
  2. Work out the area of rectangles and shapes made from rectangles  
  3. Work out the area and perimeter of rectangles, triangles, circles and semi-circles  
  4. Work out areas of composite shapes made from of rectangles, triangles, circles and/or semi-circles |
| **11. Volume** | 1. Volumes of prisms and cylinders |
| **12. Tables & Charts** | 1. Read, write and use everyday tables, charts eg mileage charts, bar charts, line graphs, currency conversion tables and timetables (bus, train and airlines).  
  2. Draw and interpret pie charts and frequency tables |

Level 1 content is shown in *italics*.  
Level 2 content is shown in **bold**.
Assessment

Assessment summary

Summary of table of assessment

Level 1

Paper code: ANM10

- One written paper with two sections.
- The paper is assessed through a 1 hour 30 minute examination, set and marked by Edexcel.
- The total number of marks for the paper is 80.
- The award is pass or fail.

Level 2

Paper code: ANM20

- One written paper with two sections.
- The paper is assessed through a 1 hour 30 minute examination, set and marked by Edexcel.
- The total number of marks for the paper is 80.
- The award is pass or fail.
## Assessment objectives and weightings

<table>
<thead>
<tr>
<th>AO1: demonstrate knowledge, understanding and skills in Number without a calculator:</th>
<th>% in Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Integers, decimals, approximation, fractions, percentages, ratio and proportion, money</td>
<td>25 – 35% L1 35 – 45% L2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AO2: demonstrate knowledge, understanding and skills in Measure:</th>
<th>% in Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Time, measures, area and perimeter, volume</td>
<td>35 – 45% L1 25 – 35% L2</td>
</tr>
<tr>
<td>• Tables and charts</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AO3: demonstrate knowledge, understanding and skills in Number using a calculator:</th>
<th>% in Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Integers, decimals, approximation, fractions, percentages, ratio and proportion, money</td>
<td>25 – 35% L1 25 – 35% L2</td>
</tr>
</tbody>
</table>

| TOTAL | 100% |
### Relationship of assessment objectives to papers

<table>
<thead>
<tr>
<th>Paper number</th>
<th>Assessment objective</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AO1</td>
<td>AO2</td>
</tr>
<tr>
<td>Level 1</td>
<td>25 – 35%</td>
<td>35 — 45%</td>
</tr>
<tr>
<td>Level 2</td>
<td>35 — 45%</td>
<td>25 — 35%</td>
</tr>
</tbody>
</table>

### Entering your students for assessment

#### Student entry

Students are entered at either Level 1 or Level 2.

Details of how to enter students for this qualification can be found in Edexcel’s *Information Manual*, copies of which (in CD format) are sent to all active Edexcel centres. The information can also be found on Edexcel’s website: www.edexcel.com

#### Access arrangements and special requirements

Edexcel’s policy on access arrangements and special considerations for GCE, GCSE, IGCSE, and Entry Level qualifications aims to enhance access to the qualifications for students with disabilities and other difficulties without compromising the assessment of skills, knowledge, understanding or competence.

Please see the Edexcel website (www.edexcel.com/sfc) for:

- the Joint Council for Qualifications (JCQ) policy Access Arrangements, Reasonable Adjustments and Special Considerations 2010-2011
- the forms to submit for requests for access arrangements and special considerations
- dates for submission of the forms.

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

Special Requirements
Edexcel
One90 High Holborn
London WC1V 7BH
Assessing your students

The first assessment opportunity Level 1 and Level 2 of these qualifications will take place in the June 2012 series and in each June series thereafter for the lifetime of the qualification. A January series is being introduced from January 2014 and in each January series thereafter for the lifetime of the qualification.

Your students' assessment opportunities

<table>
<thead>
<tr>
<th>All papers</th>
<th>June 2013</th>
<th>January 2014</th>
<th>June 2015</th>
<th>January 2015</th>
<th>June 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1 and Level 2</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

Awarding and reporting

The awarding and certification processes for this qualification will comply with the current GCSE/GCE Code of Practice, which is published by the Office of Qualifications and Examinations Regulation (Ofqual). The Level 1 and Level 2 Awards qualifications will be pass only.

The first certification opportunity for the Edexcel Level 1 and Level 2 Awards in Number and Measure will be 2012.

Students whose level of achievement is below the minimum judged by Edexcel to be of sufficient standard to be recorded on a certificate will receive an unclassified (U) result.

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 must be produced in English.

Malpractice and plagiarism

For up-to-date advice on malpractice and plagiarism, please refer to the JCQ's Suspected Malpractice in Examinations: Policies and Procedures document on the JCQ website: www.jcq.org.uk.
Student recruitment

Edexcel’s access policy concerning recruitment to our qualifications is that:

- they must be available to anyone who is capable of reaching the required standard
- they must be free from barriers that restrict access and progression
- equal opportunities exist for all students.

Prior learning

This qualification builds on the content, knowledge and skills developed in the Key Stage 3 Programme of Study for Mathematics as defined by the National Curriculum Orders for England.

Guided learning hours

The number of guided learning hours (GLH) required for this qualification is 60-70 GLH.

These qualifications can be co-taught as part of other mathematics programmes, so the delivery time allocated may be more or less than this, according to delivery plans and individual learner needs.

Progression

These qualifications support progression to:

- GCSE in Mathematics
- International GCSEs in Mathematics
- Level 1/Level 2 Certificate in Mathematics
- further Level 2 qualifications in numerate disciplines, such as the sciences, economics and business
- further education or employment where mathematical skills are required.
Level descriptors

The following level descriptions indicate the level of attainment characteristic of the given level. They give a general indication of the required learning outcomes at each specified level. The descriptions should be interpreted in relation to the content outlined in the specification; they are not designed to define that content. The level awarded will depend in practice upon the extent to which the candidate has met the Assessment Objectives overall. Shortcomings in some aspects of the examination may be balanced by better performance in others.

**Level 1**

Candidates can use multiples, factors, common factors and prime numbers. They can multiply and divide decimals with up to two decimal places, converting between fractions and decimals and percentages. They can work out simple fractions and percentages of quantities, sometimes in context. They can work through problems relating to time, and can use a variety of units of measure for carrying out measurement, and converting between units of measure. They can work out perimeters and area relating to the rectangle, and volumes of cuboids. They can read, write and use everyday tables and charts, and draw simple graphs.

**Level 2**

Candidates can find square, cubes and square roots, and can use common multiples and factors. They can multiply and divide decimals with up to two decimal places, converting between fractions and decimals and percentages. They can work out simple fractions and percentages of quantities, include increase and decrease by a fraction or percentage, sometimes in context. They can use ratio in solving problems, and can use a variety of units of measure for carrying out measurement, and converting between units of measure. They can work out perimeters and area relating to rectangles, triangles and circles, and volumes of cuboids, prisms and cylinders. They can read, write and use everyday tables and charts, including pie charts, and draw simple graphs.
Support and training

Edexcel support services

Edexcel has a wide range of support services to help you implement this qualification successfully.

**ResultsPlus** – ResultsPlus is an application launched by Edexcel to help subject teachers, senior management teams, and students by providing detailed analysis of examination performance. Reports that compare performance between subjects, classes, your centre and similar centres can be generated in ‘one-click’. Skills maps that show performance according to the specification topic being tested are available for some subjects. For further information about which subjects will be analysed through ResultsPlus, and for information on how to access and use the service, please visit www.edexcel.com/resultsplus.

**Ask the Expert** – To make it easier for you to raise a query with us online, we have merged our Ask Edexcel and Ask the Expert services.

There is now one easy-to-use web query form that will allow you to ask any question about the delivery or teaching of Edexcel qualifications. You’ll get a personal response, from one of our administrative or teaching experts, sent to the email address you provide.

We’ll also be doing lots of work to improve the quantity and quality of information in our FAQ database, so you’ll be able find answers to many questions you might have by searching before you submit the question to us.

**Examzone** – The Examzone site is aimed at students sitting external examinations and gives information on revision, advice from examiners and guidance on results, including remarking, resitting and progression opportunities. Further services for students – many of which will also be of interest to parents – will be available in the near future. Links to this site can be found on the main homepage at www.examzone.co.uk.

Training

A programme of professional development and training courses, covering various aspects of the specification and examination, will be arranged by Edexcel. Full details can be obtained from our website: www.edexcel.com
Appendices

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Appendix 1: Calculators

The range of functions on calculators is increasing all the time. Current models can be used to answer questions on a number of topics including fractions. It would clearly be unfair if sophisticated calculators gave candidates an advantage in the examination.

In addition to ensuring fairness to candidates, another of our aims as examiners is to encourage good classroom practice. Appropriate and efficient use of calculators is desirable but reliance on them at the expense of understanding and learning mathematical techniques is not.

The style of some questions on certain topics and the way in which they are marked help us achieve these aims. To assist teachers preparing students for the examination, examples of such questions are given below; model solutions, which are not unique, are also provided.

**Fractions**

Example 1

Show that \( \frac{2}{3} + \frac{3}{4} = \frac{15}{12} \) \hspace{1cm} (2 marks)

Solution

\[
\frac{2}{3} + \frac{3}{4} = \frac{8}{12} + \frac{9}{12} = \frac{17}{12} = (1 \frac{5}{12})
\]

Comment

The marks would be awarded for the unbracketed steps of the solution. Obviously, when the answer is given, candidates must give every necessary step in the working and it is better for them to err on the side of giving too much working rather than too little.
## Appendix 2: Wider curriculum

### Signposting and development suggestions

<table>
<thead>
<tr>
<th>Issue</th>
<th>Paper</th>
<th>Opportunities for development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spiritual</td>
<td>All papers</td>
<td>This qualification will enable centres to provide courses in mathematics that will allow students to discriminate between truth and falsehood. As candidates explore mathematical models of the real world there will be many naturally arising moral and cultural issues, environmental and health and safety considerations and aspects of European developments for discussion, for example:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• use and abuse of statistics in the media</td>
</tr>
<tr>
<td>Moral</td>
<td>All papers</td>
<td>• financial and business mathematics</td>
</tr>
<tr>
<td>Ethical</td>
<td>All papers</td>
<td>• how mathematics is used to communicate climate change</td>
</tr>
<tr>
<td>Social</td>
<td>All papers</td>
<td>• cultural and historical roots of mathematics</td>
</tr>
<tr>
<td>Legislative</td>
<td>All papers</td>
<td>• use of mathematics in cultural symbols and patterns.</td>
</tr>
<tr>
<td>Economic</td>
<td>All papers</td>
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<tr>
<td>Cultural</td>
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<tr>
<td>Sustainable</td>
<td>All papers</td>
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<tr>
<td>Health and safety</td>
<td>All papers</td>
<td></td>
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<tr>
<td>European initiatives</td>
<td>All papers</td>
<td></td>
</tr>
</tbody>
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# Appendix 3: Codes

<table>
<thead>
<tr>
<th>Type of code</th>
<th>Use of code</th>
<th>Code number</th>
</tr>
</thead>
</table>
| National Qualifications Framework (NQF) codes | Each qualification title is allocated a National Qualifications Framework (NQF) code.  
The National Qualifications Framework (NQF) code is known as a Qualification (QN). This is the code that features in the DfE Funding Schedule, Section 96, and is to be used for all qualification funding purposes. The QN is the number that will appear on the student’s final certification documentation. | The QN for the qualifications in this publication are:  
Level 1: 600/2241/3  
Level 2: 600/2242/5 |
| Cash-in codes                    | The cash-in code is used as an entry code to aggregate the student’s scores to obtain the overall grade for the qualification. Centres will need to use the entry codes only when entering students for their qualification. | Level 1: ANM10  
Level 2: ANM20 |
| Entry codes                      | The entry codes are used to:  
- enter a student for assessment  
- aggregate the student’s paper scores to obtain the overall grade for the qualification. | Please refer to the *Information Manual*, available on the Edexcel website. |