

<b>Title</b>	<b>Apply mathematics and statistics in a range of everyday situations</b>		
<b>Level</b>	<b>1</b>	<b>Credits</b>	<b>10</b>

<b>Purpose</b>	Learners credited with this unit standard are able to formulate mathematical and statistical approaches to solving problems in a range of everyday situations, use mathematics and statistics to meet the numeracy demands of a range of everyday situations, and explain mathematical and statistical responses to situations.
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<b>Classification</b>	Core Generic > Work and Study Skills
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<b>Available grade</b>	Achieved
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### Guidance Information

- 1 This unit standard belongs to a package of standards that forms the literacy and numeracy co-requisite to the National Certificate of Educational Achievement (NCEA) in English language. Together with unit standard 32403 *Demonstrate understanding of ideas and information in written text* and unit standard 32405 *Write texts to communicate ideas and information*, this package of standards assesses the foundational literacy and numeracy skills that enable learners to engage in further learning, life, and work.
- 2 For the purposes of this unit standard, *foundational numeracy* refers to the ability to access, use, interpret, and communicate mathematical and statistical information and ideas. These abilities enable learners to access further learning opportunities, develop important life skills, and engage in employment and in their communities. This includes an understanding of how to participate in Aotearoa New Zealand as a diverse, bicultural nation and across the wider Pacific region.
- 3 This unit standard corresponds to the Process Ideas and Significant Learning in the Numeracy Learning Matrix. It should be read together with [Unpacking Numeracy](#) and at least one of the relevant frameworks below:
  - [The New Zealand Curriculum](#) – upper Level 4, lower Level 5
  - [Curriculum Progress Tools](#), which comprise the [Learning Progressions Framework \(LPF\)](#) and [Progress and Consistency Tool \(PaCT\)](#)
    - Mathematics: The scale descriptors in the range 750 to 850
  - The [Learning Progressions for Adult Numeracy \(LPAN\)](#) – upper Step 5
  - The [Programme for the International Assessment of Adult Competencies \(PIAAC\)](#) – upper Level 2, lower Level 3
- 4 Learners will be assessed against this unit standard through an external Common Assessment Activity that is set and marked by the New Zealand Qualifications Authority.

- 5 Learners must demonstrate competency in the three outcomes through assessment tasks that sample the seven Content Ideas. These Ideas are identified in the Numeracy Learning Matrix, and are as follows:
- Fluently and flexibly solve problems that require operations on numbers, understanding the relative size of those numbers, and making sense of the answer in context.
  - Recognise and work with mathematical relationships.
  - Understand and use the spatial properties and representations of objects.
  - Understand and use systems to locate and navigate.
  - Use numbers and units to measure and express attributes of objects and events as quantities, to a degree of precision appropriate to the context.
  - Understand and reason with statistics and data.
  - Use probability to interpret situations that involve elements of chance.
- 6 The quantity and variety of situations used for assessment must give confidence that the learner can adequately meet the mathematical and statistical demands reflected in the three outcomes. All outcomes do not necessarily need to be achieved in the same situation.
- 7 Use of appropriate technology is expected. Rulers and a standard (non-scientific, non-graphing, and non-communicating) calculator, or any calculator on the [NZQA Approved Calculator List](#), may be used for the Numeracy assessment.
- 8 Definition  
*An everyday situation* is a situation that is relevant to the learner's everyday life, learning, participatory citizenship, or work.

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## Outcomes and performance criteria

### Outcome 1

Formulate mathematical and statistical approaches to solving problems in a range of everyday situations.

#### Performance criteria

- 1.1 Select an appropriate operation, representation, variable, and/or method to solve the problem(s).

### Outcome 2

Use mathematics and statistics to meet the numeracy demands of a range of everyday situations.

#### Performance criteria

- 2.1 Apply mathematical and statistical procedures correctly in the situations.

**Outcome 3**

Explain mathematical and statistical responses to situations.

**Performance criteria**

3.1 Use evidence to explain the selection of the method and/or calculation.

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<b>Planned review date</b>	31 December 2025
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**Status information and last date for assessment for superseded versions**

Process	Version	Date	Last Date for Assessment
Registration	1	22 June 2021	31 December 2022
Review	2	2 March 2023	31 December 2023
Review	3	29 February 2024	N/A

<b>Consent and Moderation Requirements (CMR) reference</b>	0233
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

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**Standard Setting Body**

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