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| Title | Use mathematics and statistics to meet the numeracy demands of a range of situations | | |
| Level | 1 | Credits | 10 |

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| Purpose | Learners credited with this Unit Standard are able to formulate situations using mathematics and statistics, employ mathematics and statistics to meet the numeracy demands of a range of meaningful situations, and interpret the reasonableness of mathematical and statistical responses. |
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| Classification | <i>To be confirmed</i> |
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| Available grade | 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 New Zealand Certificate of Achievement (NCEA) in English language. Together with [the Reading Standard] and [Writing Standard], it 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 that enables learners to access further learning, develop important life skills, and engage in employment and in their communities. In Aotearoa New Zealand, this includes an understanding of how to participate in a bicultural society.
3. This Unit Standard corresponds to the Process Ideas and Significant Learning in the Numeracy Learning Matrix. It should be read in conjunction 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 – upper Step 5
 - The Programme for the International Assessment of Adult Competencies (PIAAC) – upper Level 2, lower Level 3
4. This standard has been designed so that it can be assessed using a digital adaptive tool if one should be developed. In the interim, students will be assessed through a Common Assessment Task that is delivered by NZQA.

5. This standard has been designed so that it can be assessed using a digital adaptive tool if one should be developed. In the interim, students will be assessed through a Common Assessment Task that is delivered by NZQA.
6. Learners will demonstrate their competency through assessment tasks that sample combinations of the three Process Ideas (expressed below as Outcomes) and seven Content Ideas as identified in the Numeracy Learning Matrix, which are the following:
- i. 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.
 - ii. Recognise and work with mathematical relationships.
 - iii. Understand and use the spatial properties and representations of objects.
 - iv. Understand and use systems to locate and navigate.
 - v. Use numbers and units to measure and express attributes of objects and events as quantities, to a degree of precision appropriate to the context.
 - vi. Understand and reason with statistics and data.
 - vii. Use probability to interpret situations that involve elements of chance.
6. A calculator from the NZQA Approved Calculator List may be used during the assessment.
7. Definitions

A meaningful situation is a situation that is relevant to the candidate's learning, everyday life, participatory citizenship, and work.

Outcomes and performance criteria

Outcome 1

Formulate situations using mathematics and statistics.

Performance criteria

- 1.1 Select an appropriate operation, representation, variable, and/or method to meet the mathematical and/or statistical demands of situations.

Outcome 2

Employ mathematics and statistics to address the numeracy demands of a range of meaningful situations.

Performance criteria

- 2.1 Select and use mathematical and/or statistical procedures that are appropriate to the situation.

Outcome 3

Interpret the reasonableness of the mathematical and statistical responses.

Performance criteria

- 3.1 Interpret the reasonableness of the outcomes and/or approaches in relation to the situation.
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