| Number AS91944 | Version |
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Achievement Standard

Page 1 of 2

4

| Subject Ref | ference | Mathematics and Statistics 1.1 | | | | |
|-------------|----------------------|--|------|-------------|-------------|----------------|
| Title | | Explore data using a statistical enquiry process | | | | |
| Level | 1 | Credits | 5 | | Assessment | Internal |
| Subfield | Mathematics | | | | | |
| Domain | Mathematical Studies | | | | | |
| Status | | Approved | | Status date | | September 2024 |
| Planned rev | view date | December 2 | 2028 | Date versio | n published | December 2024 |

Purpose Statement

Students are able to explore data using a statistical enquiry process.

Achievement Criteria

| Achievement | Achievement with Merit | Achievement with Excellence | |
|--|---|---|--|
| Explore data using a statistical enquiry process | Explore data using a statistical enquiry process with statistical justification | Explore data using a statistical enquiry process with statistical insight | |

Explanatory Notes

1 *Explore data using a statistical enquiry process* involves:

- explaining the source of the data used in a statistical enquiry
- presenting the data using at least one appropriate visualisation
- describing features of the data in context with reference to at least one appropriate visualisation.

Explore data using a statistical enquiry process with statistical justification involves:

- connecting ideas within the statistical enquiry process to complete an investigation
- justifying features of the data in context, using at least one appropriate visualisation and measure.

Explore data using a statistical enquiry process with statistical insight involves:

 incorporating statistical and contextual knowledge in the completed investigation, including reflecting on the statistical enquiry process. 2 *Statistical enquiry process* means the statistical enquiry cycle or a similar process for investigating statistics or probability.

The *statistical enquiry process* can follow one of four styles of investigation:

- comparison (numerical comparison of two or more groups)
- relationship (between two numerical variables)
- time series
- experimental probabilities (involving events with at least two stages).
- 3 *Data collection process* refers to the collation of suitable data sets of sufficient size. This includes:
 - generating data through surveys or experiments using physical or digital methods, or sourcing from existing data
 - selecting continuous data or discrete data values with a sufficient range of values to allow for analysis.
- 4 Refer to the NCEA <u>glossary</u> for Māori, Pacific, and further subject-specific terms and concepts.
- 5 This achievement standard is derived from the Mathematics and Statistics Learning Area at Level 6 of *The New Zealand Curriculum:* Learning Media, Ministry of Education, 2007.

Replacement Information

This achievement standard and AS91945-AS91947 replaced AS91026-AS91038.

Quality Assurance

- 1 Schools and institutions must have been granted consent to assess by NZQA before they can register credits from assessment against achievement standards.
- 2 Schools and institutions with consent to assess must engage with the moderation system that applies to those achievement standards.

Consent and Moderation Requirements (CMR) reference 0233