

Achievement Standard**Subject Reference** Mathematics 1.6**Title** Determine probabilities**Level** 1 **Credits** 2 **Assessment** External**Subfield** Statistics and Probability**Domain** Probability**Registration date** 21 October 2003 **Date version published** 21 October 2003

This achievement standard involves calculating probabilities from provided information, and calculating probabilities using theoretical methods.

	Achievement Criteria	Explanatory Notes
Achievement	<ul style="list-style-type: none">Determine probabilities.	<ul style="list-style-type: none">Assessment will involve calculating probabilities in problems based on a selection from:<ul style="list-style-type: none">multivariate statistical dataresults of a probability experimenttheoretical methods.
Achievement with Merit	<ul style="list-style-type: none">Solve probability problems using theoretical methods.	<ul style="list-style-type: none">Probability problems will involve:<ul style="list-style-type: none">a combination of at least two eventsinterpreting information in context.Problems involving informal treatment of conditional probability may be included. This may involve the use of tree diagrams.

	Achievement Criteria	Explanatory Notes
Achievement with Excellence	<ul style="list-style-type: none"> Explore probability situations to solve problems. 	<ul style="list-style-type: none"> Students may be required to: <ul style="list-style-type: none"> describe a probability experiment which should be able to be easily carried out. make estimates use a probability tree in a reverse process solve more complex theoretical probability problems.

General Explanatory Notes

- This achievement standard is derived from *Mathematics in the New Zealand Curriculum*, Learning Media, Ministry of Education, 1992:
 - achievement objectives, pp. 188, 192
 - suggested learning experiences, pp. 189, 193
 - sample assessment activities, pp. 190, 194
 - mathematical processes, pp. 24, 26.

Quality Assurance

- Providers and Industry Training Organisations must be accredited by the Qualifications Authority before they can register credits from assessment against achievement standards.
- Accredited providers and Industry Training Organisations assessing against achievement standards must engage with the moderation system that applies to those achievement standards.

Accreditation and Moderation Action Plan (AMAP) reference

0226