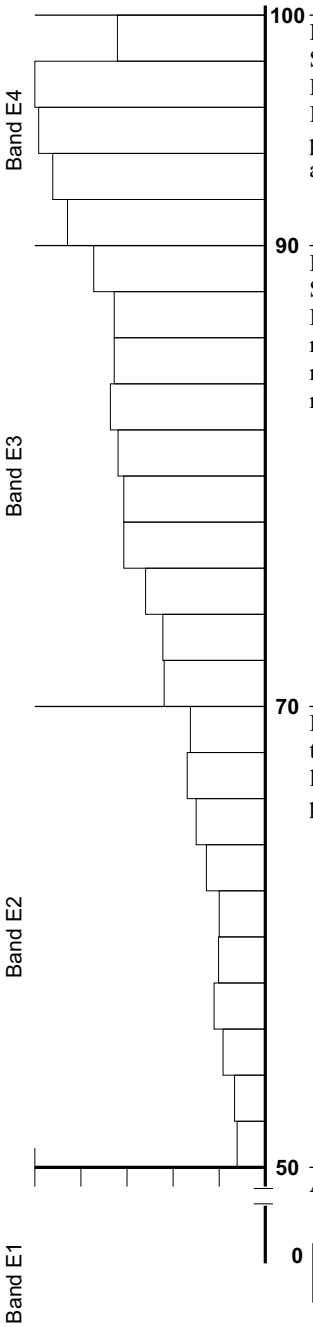
2017 Course Report

Mathematics Extension 1

State Distribution **The typical performance in this band:**



Exhibits extensive knowledge and skills appropriate to the Mathematics and Mathematics Extension 1 courses. Synthesises mathematical techniques, results and ideas creatively across the Mathematics and Mathematics Extension 1 courses to solve difficult problems. Uses sophisticated multi-step mathematical reasoning. Interprets, explains, justifies and evaluates solutions to problems. Translates efficiently between practical problems and their mathematical model. Communicates complex ideas and arguments effectively using appropriate mathematical language, notation, diagrams and graphs.

Exhibits knowledge and skills appropriate to the Mathematics and Mathematics Extension 1 courses. Synthesises mathematical techniques, results and ideas from across the Mathematics and Mathematics Extension 1 courses to solve problems in areas such as geometry, calculus and probability. Uses multi-step mathematical reasoning such as mathematical induction. Translates between practical problems and their mathematical model in areas such as projectile motion. Communicates effectively using appropriate mathematical language, notation, diagrams and graphs.

Exhibits knowledge of the techniques of the Mathematics and Mathematics Extension 1 courses. Uses techniques of integration from the Mathematics Extension 1 course such as integration by substitution. Uses logical reasoning in numerical contexts such as problems in algebra and geometry. Applies calculus to solve practical problems. Communicates using mathematical language, notation, diagrams and graphs.

A mark in this band indicates that the student has achieved below the minimum standard expected.

The candidature of this course was 8,770.