2014 Course Report

BOSTES

BOARD OF STUDIES
TEACHING & EDUCATIONAL
STANDARDS NSW

Mathematics Extension 2

State Distribution
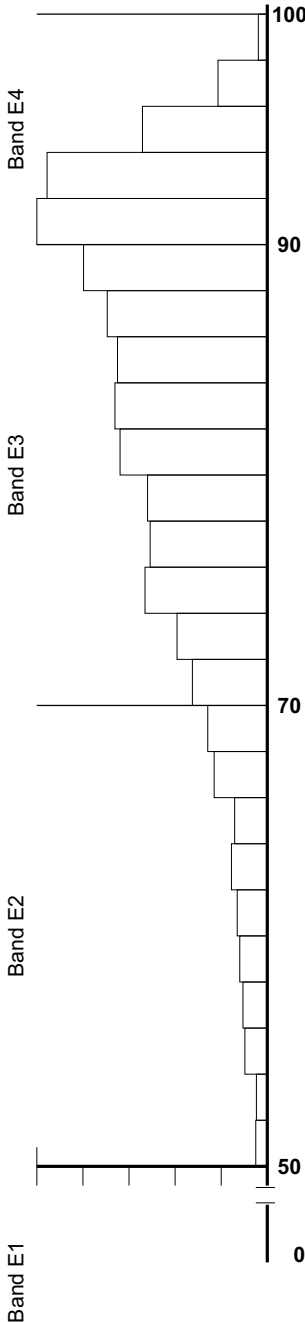
The typical performance in this band:

Band E4 (100–90)

Exhibits mastery of most aspects of the Mathematics, Mathematics Extension 1 and Mathematics Extension 2 courses. Synthesises mathematical techniques, results, and ideas creatively across the Mathematics, Mathematics Extension 1 and Mathematics Extension 2 courses to solve problems. Combines excellent algebraic and modelling skills, multi-step logic and mathematical insight to solve difficult problems. Constructs proofs in an abstract setting. Communicates sophisticated mathematical ideas and relationships using the algebraic, diagrammatic and graphical techniques of mathematics, concise notation and clear logical argument.

Band E3 (90–70)

Exhibits facility with the techniques of the Mathematics, Mathematics Extension 1 and Mathematics Extension 2 courses. Solves problems from the Mathematics Extension 2 topic areas, such as complex numbers, volumes, polynomials, conics and mechanics. Successfully graphs a wide variety of functions showing critical points, asymptotes and points of inflexion without necessarily using calculus. Demonstrates a sound grasp of both algebraic and geometric techniques required to solve problems. Communicates mathematical ideas and relationships using the algebraic, diagrammatic and graphical techniques of mathematics, appropriate notation and logical argument.

Band E2 (70–50)

Exhibits knowledge of the techniques of the Mathematics, Mathematics Extension 1 and Mathematics Extension 2 courses. Solves standard problems from the Mathematics Extension 2 topic areas such as integration and complex numbers. Graphs a wide variety of functions showing many features without necessarily using calculus. Applies calculus and other appropriate ideas to model practical problems. Communicates effectively using mathematical language, notation, diagrams and graphs.

Band E1 (50–0)

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

The candidature of this course was 3,371.