

Condobolin High School





Name and Type of Task: Yearly Exam	
Year OR Stage: Year 9	
Subject: Mathematics	Task Number: 3
Date Issued: Thursday 23 rd October 2025	Date Due: Term 4, Week 4 2025
Term 4, Week 2 2025	As per exam timetable
Total Marks: 50	Weighting: 40%
Class Teacher/s: Mrs Davis Mrs Waller	Head Teacher: Mrs Davis

Submission Instructions – Students are to complete the class task on the day given on the exam timetable. The task MUST be submitted to the teacher/supervisor upon completion and is NOT to be removed from the room.

Task Context:

In this task, students will demonstrate their understanding of key concepts in:

- **Linear Relationships**: including plotting points, gradient, y-intercept, table of values, graphing lines, solving simultaneous equations graphically and direct variation including conversion graphs
- **Probability**: including single and multi-step probability and interpreting data using tables and Venn diagrams

Students will be required to interpret diagrams, perform calculations, and justify their answers with clear working.

Syllabus Content:	
MA0-WM-01	Develops understanding and fluency in mathematics through exploring and connecting mathematical concepts, choosing and applying mathematical techniques to solve problems, and communicating their thinking and reasoning coherently and clearly.
MA5-EQU-C-01	Solves linear equations of up to three steps, limited to one algebraic fraction.
MA5-EQU-P-02	Solves linear equations of more than 3 steps, monic and non-monic quadratic equations, and linear simultaneous equations.
MA5-LIN-C-01	Determines the midpoint, gradient and length of an interval, and graphs linear relationships, with and without digital tools.
MA5-LIN-C-02	Graphs and interprets linear relationships using the gradient/slope-intercept form.
MA5-LIN-P-01	Describes and applies transformations, the midpoint, gradient/slope and distance formulas, and equations of lines to solve problems
MA5-PRO-C-01	Solves problems involving probabilities in multistage chance experiments and simulations.
MA5-PRO-P-01	Solves problems involving Venn diagrams, two-way tables and conditional probability.
MA5-RAT-P-01	Identifies and solves problems involving direct and inverse -variation and their graphical representations

Task Description

You will be provided with a range of questions in the form of a one period exam.

The exam will be separated into 2 parts, according to the topics: Linear Relationships (25 marks) and Probability (25 marks)

Section 1: Multiple choice - Linear Relationships (5 marks) and Probability (5 marks) - (10 marks in total)

Section 2: Linear Relationships (20 marks) and Probability (20 marks) - (40 marks in total)

Marks will be allocated throughout the task.

You will require a pen, pencil, ruler and a NESA-approved calculator.

Criteria for Assessing Learning:

You will be assessed on your ability to:

- Plot points on the coordinate axes
- Identify/Calculate the gradient/slope and y-intercept from an equation and a graph
- Identify x-intercepts from a graph
- Complete a table of values and plot associated points
- Identify/Calculate gradients for parallel and perpendicular lines
- Determine whether a point lies on a line
- Interpret and answer questions using conversion graphs
- Solves direct variation problems
- Graph a straight line using a table of values or y = mx + c
- Interpret and complete two-way tables and Venn diagrams to calculate probabilities
- Apply the rules of probability to determine single and compound event probabilities

Key Verbs:

Calculate: Determine from given facts, figures or information

Marking Guidelines:

Marks are allocated to questions on the exam paper.