



Year 12 Mathematics Standard 1 Assessment Task 1 - 2023

TOPIC: Introduction to Networks	MARKS: 32 marks
SUBMISSION REQUIREMENTS: Term 4 – Week 9 - This assignment is to be handed to your class teacher as you enter the room.	WEIGHTING: 20%

OUTCOMES TO BE ASSESSED:

MS1-12-8 : Applies network techniques to **solve** network problems.

MS1-12-10 : Uses mathematical argument and **reasoning** to evaluate conclusions, **communicating** a position clearly to others.

DIRECTIONAL VERBS:

Apply – use, utilise, employ in a particular situation

Communicates – Explains, connects, relates cause and effect; make the relationships between things evident; provide why and/or how using appropriate terminology, diagram and/or symbols

Solve – find an answer to, explanation for, or means of effectively dealing with a problem

Reasoning – action of thinking about something in a logical, sensible way

Model – simplified description of a system or process to assist calculations and predictions

Justify – to support an answer

TASK DESCRIPTION:

This assignment involves the use of network theory to solve a number of real world problems. All parts of the task are to be completed individually in this booklet.

ASSESSMENT CRITERIA:

You will be assessed on how well you:

- accurately solve a variety of problems based on the scenario
- select and use appropriate mathematical processes, technologies and language to investigate, organise and interpret networks
- provide reasoning and justification related to the problems.

Feedback will be provided outlining strengths and areas for improvement to build on knowledge, understanding and skills for future learning.