



## Year 12 Mathematics Standard 2 Assessment Task 1 - 2023

<b>TOPIC:</b> Introduction to Networks	<b>MARKS:</b> 34 marks
<b>SUBMISSION REQUIREMENTS:</b> Term 4 – Week 9 - This assignment is to be handed to your class teacher as you enter the room.	<b>WEIGHTING:</b> 20%

**OUTCOMES TO BE ASSESSED:**

**MS2-12-8** : solves problems uses networks to model **decision making** in practical problems

**MS2-12-9** : chooses and uses appropriate technology effectively in a range of contexts, and **applies** critical thinking to **recognise** appropriate times and methods for such use

**MS2-12-10** : uses mathematical argument and **reasoning** to evaluate conclusions, **communicating** a position clearly to others and **justifying** a response

**DIRECTIONAL VERBS:**

**Apply** – use, utilise, employ in a particular situation

**Recognise** – to be able to distinguish what something is based on knowledge of the features and/or characteristic of that thing

**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 real world problem.

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, u understanding and skills for future learning.