

# PICTON HIGH SCHOOL

Creating Opportunities Achieving Success



## YEAR 12 MATHEMATICS STANDARD 1

### Trial HSC Examination 2020

<b>Due Date:</b> Wednesday 12 <sup>th</sup> of August 2020 9:10am	<b>Assessment Name:</b> Trial HSC Examination
<b>Mark:</b> x/80	<b>Weighting:</b> 40 %
<b>SYLLABUS OUTCOMES TO BE ASSESSED:</b>	
MS1-12-1	<b>Uses</b> algebraic and graphical techniques to <b>evaluate</b> and <b>construct</b> arguments in a range of familiar and unfamiliar contexts
MS1-12-2	<b>Analyses</b> representations of data in order to make <b>predictions</b> and <b>draw</b> conclusions
MS1-12-3	<b>Interprets</b> the results of measurements and calculations and <b>makes</b> judgements about their reasonableness
MS1-12-4	<b>Analyses</b> simple two-dimensional and three-dimensional models to <b>solve</b> practical problems
MS1-12-5	<b>Makes</b> informed decisions about financial situations likely to be encountered post-school
MS1-12-6	<b>Represents</b> the relationships between changing quantities in algebraic and graphical forms
MS2-12-7	<b>Solves</b> problems requiring statistical processes
MS1-12-8	<b>Applies</b> network techniques to <b>solve</b> network problems
MS1-12-9	<b>Chooses</b> and <b>uses</b> appropriate technology effectively and <b>recognises</b> appropriate times for such use
MS1-12-10	<b>Uses</b> mathematical argument and reasoning to <b>evaluate</b> conclusions, communicating a position clearly to others
<b>Note:</b> As up to 30% of the assessment mark submitted to the Board of Studies may be based on the Preliminary Mathematics Standard 1 course. Any preliminary outcomes can be assessed. Refer to <a href="https://syllabus.nesa.nsw.edu.au/assets/mathematics_standard/mathematics-standard-stage-6-syllabus-2017.pdf">https://syllabus.nesa.nsw.edu.au/assets/mathematics_standard/mathematics-standard-stage-6-syllabus-2017.pdf</a>	
<b>DIRECTIVES TO BE ASSESSED:</b>	
<b>Analyse:</b> To identify causes, key factors, relationships and possible results.	
<b>Answer:</b> To provide a written reply or response to a question.	
<b>Choose:</b> To select items or answer from a collection of values.	
<b>Construct:</b> To draw a shape, line or angle accurately using a compass, ruler or geometrical instruments.	
<b>Evaluate:</b> To make a judgement based on criteria; determine the value of.	
<b>Interpret:</b> To draw meaning from a mathematical situation.	
<b>Justify:</b> To provide evidence to support your solution.	
<b>Makes:</b> To produce; cause to exist or happen; bring about	
<b>Predict:</b> To make an educated guess about future events.	
<b>Solve:</b> To find the answer to or explanation for effectively dealing with a problem.	
<b>Use:</b> To manipulate something for a particular purpose to solve mathematical problems.	

**TASK DESCRIPTION:**

You will complete a **2 hour** examination, with an extra 10 minutes reading time, covering all coursework studied in the Mathematics Standard 1 course listed below. Note Preliminary outcomes can be tested as a part of this examination. The examination will involve 10 multiple choice questions and 29 extended response questions.

A board approved formulae sheet will be provided with your examination paper.

**Section 1 – 10 Multiple choice questions are worth 10 marks in total. (1 mark each)**

**Section 2 – 24 extended response questions are worth 70 marks in total. (70 Marks)**

**The topics assessed are:****HSC Standard 1 Course**

MS-A3	Types of Relationships
MS-M3	Right-angled Triangles
MS-M4	Rates
MS-M5	Scale Drawings
MS-F2	Investment
MS-F3	Depreciation and Loans
MS-S3	Further Statistical Analysis
MS-N1	Networks and Paths

**Preliminary Course up to 30% of the assessment mark**

MS-A1	Formulae and Equations
MS-A2	Linear Relationships
MS-M1	Applications of Measurement
MS-M2	Working with Time
MS-F1	Money Matters
MS-S1	Data Analysis
MS-S2	Relative Frequency and Probability

**Recommended equipment:**

- NESAs approved scientific calculator
- Pens, ruler, pencils

**ASSESSMENT CRITERIA – STUDENT CHECKLIST:**

Have you

- Revised the following topics by completing Exercises, chapter reviews cumulative chapter reviews and ensuring you have referenced syllabus documents:
  - MS-A3 Types of Relationships
  - MS-M3 Right-angled Triangles
  - MS-M4 Rates
  - MS-M5 Scale Drawings
  - MS-F2 Investment
  - MS-F3 Depreciation and Loans
  - MS-S3 Further Statistical Analysis
  - MS-N1 Networks and Paths
  - MS-A1 Formulae and Equations
  - MS-A2 Linear Relationships
  - MS-M1 Applications of Measurement
  - MS-M2 Working with Time
  - MS-F1 Money Matters
  - MS-S1 Data Analysis
  - MS-S2 Relative Frequency and Probability
- Completed generated HSC Online Multiple choice questions on the NESAs website.  
Refer to: <https://quiz.nesa.nsw.edu.au/>