JOHN EDMONDSON HIGH SCHOOL
Assessment Notification

Faculty: Mathematics **Course: Mathematics Standard 2** **Year: 12**

Assessment Task: 3

Assessment Weighting: 20% **Due: Term 2, Week 6** **Date: Friday 2nd June 2023**

Task Type: Hand in Task ☐ In Class Task ☒ Practical Task ☐

Outcomes Assessed (NESA)

MS2-12-1, MS2-12-2, MS2-12-5, MS2-12-6 MS2-12-7, MS2-12-8, MS2-12-10
Please Note: Further information about these outcome codes can be found on the NESA Website

Task Description/Overview

This in class written examination will consist of multiple choice and short answer questions.
A Mathematics Standard 2 Reference Sheet will be provided.
Time allowed: 1 hour 30 minutes plus 5 minutes reading time.
Equipment Required: Black Pen(s), a NESA approved calculator and ruler.

Detailed Assessment Task Description

Topics to be assessed will be:

Rates and Ratios:
Examination questions may require students to use rates to solve and describe practical problems, use rates to make comparisons, interpret the energy rating of household appliances and compare running costs, solve practical problems involving ratios, use ratios to describe map scales, obtain measurements from scale drawings, interpret symbols and abbreviations on building plans and elevation views, calculate perimeter, area and volume using a scale.

Bivariate Data Analysis:
Examination questions may require students to construct bivariate scatterplots to identify patterns in data, use bivariate scatterplots to describe the patterns, features and associations of bivariate data, identify the dependent and independent variables within bivariate datasets, calculate and interpret Pearson's correlation coefficient to quantify the strength of a linear association of a sample, model a linear association by fitting an appropriate line of best fit to a scatterplot and using it to describe patterns and associations, model a linear association by fitting a least-squares regression line to the data, use an appropriate line of best fit to make predictions by either interpolation or extrapolation.

Investments and Loans:
Examination questions may require students to calculate the future value or present value and the interest rate of a compound interest investment, compare the growth of simple interest and compound interest investments numerically and graphically, compare and contrast different investment strategies, solve practical problems involving compounding, work with shares and calculate the appreciated value of items, record and graph the price of a share over time, calculate the dividend paid on a portfolio of shares, and the dividend yield, calculate the depreciation of an asset using the declining-balance method, solve practical problems involving reducing balance loans, solve practical problems relating to credit cards, identify the various fees and charges associated with credit card usage, compare credit card interest rates with interest rates for other loan types, interpret credit card statements, understand what is meant by an interest-free period.

Please Note: More detailed topic overviews are published on CANVAS

Examination Structure	
Section Description	**Marks Available**
Section 1 – Multiple Choice	
10 Multiple Choice Questions	10
Section 2 – Short Answer	
Rates and Ratios	15
Bivariate Data Analysis	15
Investments and Loans	20
Total Marks for this task	**60**

Satisfactory completion of courses

A course has been satisfactorily completed when the student has:

- Followed the course developed/endorsed by the NSW Educational Standards Authority (NESA)
- Applied himself/herself with diligence and sustained effort to the set tasks and experiences provided in the course.
- Achieved some or all of the course outcomes