

# ORANGE HIGH SCHOOL

# ASSESSMENT TASK NOTIFICATION

Subject	Mathematics
Торіс	Mid Course Examination – Topics listed below
Class Teacher	Saini, Smith, Brown, Routh, Arnott, Sood, Harrison, Lummis
Head Teacher	Stevenson
Year	8
Date Given	Week 2 Term 3
Date Due	Week 4 Term 3
Weighting	40%

# **Assessment Outline**

This examination consists of two parts. There will be a <u>1 period in-class examination</u> for each part.

# <u> PART 1</u>

### **Pythagoras' Theorem**

- Squares and Square roots
- Testing Right-Angled Triangles
- Pythagorean Triads
- Finding the Hypotenuse
- Finding a Shorter Side

#### Measurement

- Conversion of Units
- Perimeter
- Estimating and Calculating Area of simple shapes and quadrilaterals
- Identifying Prisms and Pyramids
- Volume and Capacity of Prisms

#### Circles

- Parts of a Circle
- Pi and Irrational Numbers
- Circumference of Circles, Sectors and Composite Shapes
- Area of Circles and Sectors
- Volume of Cylinders

# Course Outcomes (Part 1):

**MA4.1WM** – Communicates and connects mathematical ideas using appropriate terminology, diagrams and symbols.

MA4.2WM – Applies appropriate mathematical techniques to solve problems.

**MA4.3WM** – Recognises and explains mathematical relationships using reasoning.

MA4.12MG - Calculates the perimeters of plan shapes and the circumferences of circles.

**MA4.13MG** – uses formulas to calculate the area of quadrilaterals and circles, and converts between units of area.

**MA4.14MG** – uses formulas to calculate the volumes of prisms and cylinders, and converts between units of volume.

**MA4.16MG** – Applies Pythagoras' Theorem to calculate the side lengths in right-angled triangles, and solves related problems.

# <u> PART 2</u>

# Algebraic Techniques

- Language of Algebra
- Addition, Subtraction, Multiplication and Division of Algebraic Terms
- Expanding and Factorising Algebraic Expressions
- Index Laws

# **Data Collection and Representation**

- Types of Data
- Sampling and Data Collection
- Presenting data using Dot Plots, Column Graphs, Line Graphs, Sector Graphs and Divided Bar Graphs.

# **Financial Mathematics**

- Finding and Expressing Percentages
- Percentage Increase and Decrease
- Applying the Unitary Method
- Percentage Change, Profit and Loss
- GST
- Best Buys

# Course Outcomes (Part 2):

**MA4.1WM** – Communicates and connects mathematical ideas using appropriate terminology, diagrams and symbols.

**MA4.2WM** – Applies appropriate mathematical techniques to solve problems.

MA4.3WM – Recognises and explains mathematical relationships using reasoning.

MA4.3NA – generalises number properties to operate with algebraic expressions.

MA4.9NA – Operates with positive-integer and zero indices of numerical bases.

MA4.5NA – Operates with fractions, decimals and percentages.

MA4.6NA – Solves financial problems involving purchasing goods.

MA4.19SP - Collects, represents and interprets single sets of data, using appropriate statistical displays

# Required equipment:

- Black or Blue pen or pencil
- Calculator

# Non-completion of Task:

If you know you are going to be away on the day that the task is due, you must make alternative arrangements with your teacher beforehand. If you are suddenly away on the day that the task is due, you must contact your teacher or Head Teacher on your return to school. Documentation will be required in both cases.

# <u>Plagiarism:</u>

Plagiarism, the using of the work of others without acknowledgement, will incur serious penalties and may result in a zero award. Any cheating will also incur penalties.

Failure to follow the above procedures may result in a zero award. The policies and procedures that are outlined on the ROSA booklet will be followed regarding the noncompletion of assessment tasks.