

JOHN EDMONDSON HIGH SCHOOL Assessment Notification

Faculty: Mathematics Course: Stage 4 Year: 7

Assessment Task: 2 for 7T, 7O, 7B, 7R, 7U

Assessment Weighting: 30% Due: Term 2 Week 4 Date: Monday 20/05/2024

Task Type: Hand in Task 🗌 In Class Task 🖂 Practical Task 🗌

Outcomes assessed (NESA)

MA4-FRC-C-01, MAO-WM-01, MA4-INT-C-01

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 short answer questions. No reference material is allowed during the examination Time allowed: 45 Minutes (within 1 Period) Equipment Required: Black Pen, ruler. Note: Calculators are not allowed to be used in this examination.

Detailed Assessment Task Description

Students may be asked questions relating to:

Computation with Integers

- Recognise and describe the direction and magnitude of integers
- Identify and represent integers on a number line
- Compare the relative value of integers using the less than (<) and greater than (>) symbols
- Order integers
- Read, write, and order numbers of any size
- State the place value of each digit in numbers of any size
- Record numbers of any size using expanded notation
- Determine factors and multiples of whole numbers and LCM and HCF
- Identify and describe prime and composite numbers
- Express numbers as a product of prime factors using factor trees
- Apply associative, commutative, and distributive laws to aid mental computation
- Use mathematical symbols to show meaning of worded expressions (sum, difference, product, quotient etc.)
- Recognize abbreviations of numbers in everyday contexts, ie, 350K = 350 000
- Round numbers to a specified place value
- Add and subtract integers with and without the use of digital tools
- Construct a directed number sentence to model a situation
- Examine different meanings (position or operation) for the and signs, depending on context
- Represent multiples of negative integers as repeated addition
- Multiply and divide positive and negative integers with and without the use of digital tools
- Apply the 4 operations to integers
- Solve problems involving grouping symbols with integers
- Apply the order of operations to evaluate expressions involving integers, with and without the use of digital tools

Fractions

- Determine the highest common factor (HCF) of 2 whole numbers
- Examine methods of generating equivalent fractions
- Simplify fractions by using methods, including determining the HCF of the numerator and denominator or repeated simplification using common factors
- Create fractions with the same denominator to compare their sizes
- Compare and order fractions with different denominators
- Define rational numbers as numbers that can be written in the form a/b, where a and b are integers and b≠0
- Classify fractions as rational numbers
- Represent fractions as decimals (terminating and recurring)

(simple fractions including $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$, $\frac{1}{3}$, $\frac{2}{3}$, fractions with denominators of 5 and 10 etc.)

- Represent improper fractions as mixed numbers
- Represent percentages as fractions and decimals (simple fractions $-\frac{1}{4}, \frac{1}{2}, \frac{3}{4}, \frac{1}{3}, \frac{2}{3}$ fractions with denominators of 5 and 10 etc.)
- Locate positive and negative fractions and mixed numbers on a number line to compare their relative values
- Compare and order fractions and mixed numbers
- Represent addition and subtraction of fractions with the same or unrelated denominators
- Solve problems involving adding and subtracting fractions and mixed numbers, including finding a common denominator
- Solve problems that involve subtracting a fraction from a whole number, with and without the use of digital tools
- Compare and generalise the effect of multiplying or dividing by a number with magnitude between zero and one
- Represent multiplication and division of fractions, including mixed numbers
- Multiply and divide fractions and mixed numbers, with and without using digital tools to solve problems
- Compare initial estimates with the results of calculations
- Apply knowledge of fractions of quantities to solve problems
- Apply knowledge of multiplication and division of fractions to solve problems
- Represent one quantity as a fraction of another by considering appropriate units

Test/Examination Structure		
Section Description		Marks Available
Computation with Integers		25
Fractions		25
	Total Marks for this task	50

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