



GRADE 7 STANDARDS OF MATHEMATICS REQUIRED

TOPIC	CONTENT
Numbers and numerals	State the place values of digits in numbers; write numbers in figures and words; find the missing number of a sequence; use the symbols $=$, $<$, $>$ to compare numbers; add, subtract, divide and multiply numbers; recognize and describe sets of numbers; find factors and multiples of numbers, prime numbers; express a number in prime factors, and find the highest common factor (H.C.F) and lowest common multiple (L.C.M) of numbers.
Approximations	Round numbers to the nearest 10, 100, 1,000, 10,000. Round measurement to given decimal place and significant figures.
Fractions	Add, subtract, multiply and divide fractions; recognize equivalent fractions, mixed numbers and improper fractions; compare and order fractions. Solve word problems involving fractions.
Directed Numbers	Recognise that $-2 > -3$, $0 > -1$ and $-3 < 3$. Perform operations on directed numbers; addition subtraction, multiplication and division. Solve problems with directed numbers that involve a combination of these operations using order of operation.
Decimals and percentages	Express decimals in expanded form; perform operations on decimals; Understand the relationship between decimals, fractions and percentages and be able to convert one to another; express a quantity as a percentage of another; calculate percentage increase or decrease.
Measurements	Use standard units of mass, length, area and volume, express quantities in terms of larger and smaller units; calculate the perimeter and area of triangles, quadrilaterals and the volume derived from these shapes; add and subtract metric quantities. Convert from one unit of measure to another, say, metres to centimetres.
Ratio and proportion	Recognize the notation of ratios and express them in their simplest forms; use direct and indirect proportions.
Algebra	Expand brackets and simplification of algebraic expressions. Solve linear equations with variable on both sides of equation; solve equations in word problems. Simple factorizing linear expressions
Space and shape	Recognize plane shapes and solid figures figures and draw nets of solids; identify solids and write the number of faces, vertices, and edges. Angle properties of parallel lines. Recognise and solve problems involving parallel lines transversal congruent angles; corresponding, alternate, vertically opposite and allied angles.
Money	Calculate using money; solve problems on simple interest, profit and loss, and discount
Statistics	Collect data and construct frequency tables; represent data on bar charts, pictograms, and pie charts; calculate the mean, median and mode for sets of data.
Algebra	Simplifying like algebraic terms, Solving simple linear equations for integer values.



EXAMINATION CRITERIA - PRE-IGCSE

SECTION A

15 Multiple Choice questions
Candidates should answer each question
Weighting: 30%

SECTION B

Structured Questions (demanding elaborate solutions)
Candidates should answer each question.
Weighting: 50%

SECTION C

Aptitude Test
Candidates should answer each question
Weighting: 20%