

CBMC (Contest Bag Math Challenge)

Grade 3 to Grade 6 - Syllabus

	Grade			
Topics	3	4	5	6
Pattern and sequences of numbers.	√	✓	✓	✓
Problems Solving with numbers no more than 1,000.	√	✓	✓	√
Problems solving with numbers more than 100,000.	√	√	✓	✓
Problems solving with whole numbers.	✓	✓	✓	✓
Problems solving with fraction and decimal.		✓	✓	✓
Solving equation in one variable.				✓
Mensuration, lengths, perimeters, time, calendar.	✓	✓	✓	✓
Points, lines, rays, angles, geometric figure.	✓	√	✓	✓
Area of geometric figures.		✓	✓	✓
Angle, parallel line, triangle, quadrilateral, circles.			✓	✓
Volume of solid figure.				✓
Addition, Subtraction, Multiplication, Division.	✓	✓	✓	✓
Numbers with more than 100,000.	√	✓	✓	✓
Factors, multiple and properties of integers.		✓	✓	✓
Fraction and decimal operation.		✓	✓	✓
Percentage.			✓	✓
Ratio, GCD, LCM, prime numbers.				✓
Money, Income, Bar chart, Pie-chart.	✓	✓	✓	✓
Basic statistics and probability.		√	✓	✓
Rate problems.			✓	✓



Grade 7 to Grade 9 - Syllabus

	Grade		
Topics	7	8	9
Exponent and its application	✓	✓	✓
Problem solving with one variable linear equation and its application	✓	✓	✓
Basic operation of polynomials	✓	✓	✓
Quadratic polynomial, Rational Function		√	✓
Algebraic Identities, Real numbers system		✓	✓
Higher degree polynomial equation			✓
System of linear and non-linear equations.			✓
Measuration, angle, parallel line, Construction	✓	✓	✓
Triangle, quadrilateral, parallelogram, trapezoid, circles	✓	✓	✓
Congruent, Pythagorean theorem and its application		√	✓
Similarity, circle geometry		√	✓
Surface area and volume of solid figure			✓
Basic Trigonometry			✓
Line equation, parabola and their graphs			✓
Integers, prime numbers, factors, multiple, GCD, LCM	✓	✓	✓
Number bases, Estimation and Approximation	✓	✓	✓
Pattern and Sequences of numbers	✓	✓	✓
Percentage, Ratio, Mathematical Reasoning	✓	✓	✓
Rate problems	✓	✓	✓
Bar Chart, Pie-chart		√	√
Variation and proportion		√	√
Basic statistics and probability			√



Grade 10 & Grade 11 - Syllabus

	Grade	
Topics	10	11
Set operation, Logic	✓	✓
Real numbers system	✓	✓
Solving Inequalities	✓	✓
Exponential function	✓	✓
Matrix	✓	√
Analytical geometry and conic sections	✓	>
Relation and function	✓	✓
Logarithm function	✓	✓
Trigonometric function		✓
Radical equation		>
Complex numbers		✓
Vectors		✓
Counting techniques		✓
Probability		✓