TERM PLAN

Mathematics

Grade 10 — 1st term

Serial number	Lesson	Competency level	Content	Number of periods	Expected teaching dates	Activated teaching dates
01	Perimeter	7.1	• Perimeter • Sectors • Compound figures containing sectors	04		
02	Square Root	1.1	• Square root • Approximation (First approximation only) • Division Method	04		
03	Fractions	3.1	• Solving problems involving fractions	04		
04	Binomial Expressions	14.1	• Expansion of binomial expressions • Of the form (a x + by) (cx + dy); a, b, c, d ∈ • Expansion of (a x + by)2; a, b ∈	04		
05	Congruency	23.3	• Identifying the conditions under which two triangles are congruent and applications • S.A.S. • S.S.S • A.A.S • Hyp. S	05		
06	Area	8.1	• Area • Sectors • Compound plane figures involving sectors	04		
07	Factors of Quadratic	15.1	• Finding factors	04		

	Expression		• Difference of two squares • Of the form $2\ ax + bx + c;\ a \neq 0$			
08	Triangles	23.1, 23.2, 23.4, 23.5	• Proof of the theorem "The sum of the three interior angles of a triangle is 180o" and related problems • Isosceles Triangles • Application and proof of the theorems • Application of the converse of the theorems	10		
09	Inverse Proportion	4.1	• Introducing inverse proportions • Problems related to inverse proportions • Work and time • Representing inverse proportions algebraically • Solving problems using x	05		
10	Data Representation	28.2	• Data representation • Pie charts	03		

Serial number	Lesson	Competency level	Content	Number of periods	Expected teaching dates	Activated teaching dates
11	Least Common Multiple of Algebraic Expressions	16.1	• Least common multiple of algebraic expressions	04		
12	Algebraic Fractions	16.2	• Algebraic fractions (With unequal denominators) • Addition • Subtraction	04		
13	Percentages	5.1, 5.2	• Types of taxes (Duty,	07		

			income tax, rates, VAT) • Introduction • Installments • Simple interest • Interest Rate • Annual/monthly • Calculating the interest			
14	Equations	17.1, 17.2, 17.3	• Linear equations with algebraic fractions • Solving • Constructing • Simultaneous equations • Constructing • Solving • Solving quadratic equations • Using factors	08		
15	Parallelograms I	23.6, 23.7	• Properties • Application and proof of the theorem • Application of the theorem "The diagonals of a parallelogram bisect each other"	07		
16	Parallelograms II	23.8, 23.9, 23.10	• Necessity • Application of the theorem • Application of the theorem "If the opposite angles of a quadrilateral are equal, it is a parallelogram"	09		
17	Sets	30.1, 30.2	• Set notation • Descriptive form • As a collection of elements • By Venn diagrams • Generating form •Solving problems related to Sets	08		
18	Logarithms I	6.1, 6.2	• Relationship between	05		

			indices and logarithms • Logarithm ⇔ Power • Laws of Logarithms • Multiplication • Division			
19	Logarithms II	6.3, 6.4	• Use of the logarithm tables • Expressions involving numbers greater than 1 • Multiplication • Division	05		
20	Graphs	20.1, 20.2, 20.3	• Calculating the gradient of a straight line • Drawing the graph • Maximum/minimum value • Coordinates of the turning point • Equation of the axis of symmetry • Behavior of the graph • Properties of quadratic functions of the form $y = ax2$ and $y = ax2 + b$	09		
21	Rate	12.1	• Distance and time • Representation by a distance time graph • Gradient of the graph • Volume and time	05		

Serial number	Lesson	Competency level	Content	Number of periods	Expected teaching dates	Activated teaching dates
22	Formulae	19.1	• Formulae • Changing the subject of formulae • Substitution	03		
23	Arithmetic Progressions	2.1, 2,2	• Arithmetic Progressions	07		

			• Introduction
			  • *n*th term
			• Arithmetic Progressions
			  • Sum of the first *n* terms			

24	Algebraic Inequalities	18.1	• Solving inequalities and representing solutions on a number line • Integral solutions • Intervals of solutions • Representing inequalities on a coordinate plane	06		

25	Frequency Distributions	28.1, 29.1	• Types of date
			• Continuous
			• Discrete
			• Grouped frequency distribution
			  • Mid-values
			• Interpretation of data
			  • Mean of a grouped frequency distribution
			  • Using the mid-value
			  • Using the assumed mean
				10		

26	Chords of a Circle	24.1, 24.2	• Chord • Application and proof of the theorem	06		
27	Constructions	27.1, 27.2, 27.3	• Constructs the four basic Loci • Construction of triangles • Constructs quadrilaterals	10		

28	Surface Area and Volume	8.2 8.3, 10.1, 10.2	• Surface Area
			  • Cylinder
			• Surface Area
			  • Right prism with a triangular cross-section
			• Cylinder
			  • Formula for the volume
			  • Application of the
				09		

			Formula • Prism with a triangular cross-section • Formula for the volume • Application of the formula			
29	Probability	31.1, 31.2	• Events • Simple • Compound • Complement • $P(A \cup B) = P(A) + P(B) - P(A \cap B)$ • $P(A \cup B) = P(A) + P(B)$	08		
30	Angles in a Circle	24.3, 24.4	• Angles • Application and proof of the theorem •Angles in the same segment of a circle •The angle in a semicircle	08		
31	Scale Diagrams	13.1	• Drawing scale diagrams of a vertical plane • Describing the location using a scale diagram • Drawing 2-dimensional vertical scale diagrams	05		
32	Formulae	19.1	• Formulae • Changing the subject of formulae • Substitution	03		

Signature of the teacher……

Approval of the principal…….