

Tripoli Evangelical School

Secondary One Mathematics Curriculum

Textbook: Secondary Education 1st Year. Collection: Puissance. Al–Ahlia.

Chapter	Chapter Title	Periods
0	Revision (Factorization, Solving Equations, Powers)	3
1	Sets <i>Definition, Subset, Complement of a subset, Intersection, Union, Parts of a set, Set of Numbers</i>	8
2	Absolute Value and Intervals <i>Definition, Distance between 2 real numbers, Properties of the absolute value, Intervals, Real-World Applications (Supplementary Sheet)</i>	9
3	Powers and Radicals <i>Powers having natural exponents, Powers having rational and irrational exponents, properties of powers, Square Root, n^{th} Root</i>	6
5	Addition of Vectors <i>Definition, Zero Vector, Unit Vector, Equal Vector, Opposite Vectors, Addition of vectors in 2 ways, Subtraction and Decomposition of Vectors</i>	4
6	Multiplication of a Vector By a Real Number <i>Definition, Properties, Collinear Vectors, Midpoint of a Segment, Center of Gravity of a triangle, Writing Vectors as a linear combination of many vectors, Using Thales to prove Collinearity</i>	6
4	Order on R <i>Rule of Signs, Order of Operations, Comparing Two Real Numbers, Framing of Real Numbers (Addition, Subtraction, Multiplication, Division, Amplitude)</i>	5
7	Polynomials <i>Definition, Null and Equal Polynomials, Numerical Value, Reducing and</i>	7

	<i>Ordering a Polynomial. Root of a Poly, Euclidean Division, Technique of Factorization by (x-a) using the Identification Method</i>	
10	Trigonometric Circle <i>Units of arcs and Angles, Relation between Degree and Radian, Length of an Arc, Area of an Angular Sector, Trigonometric Circle, Principal Determination, Measure of Oriented Arcs, Using the Calculator</i>	4
11	Trigonometric Lines <i>Trig. Ratios in a Right Triangle and in a Scalene Triangle (Extra Sheet), Trig. Lines, Signs of Trig. Ratios, Remarkable Arcs, Associated Arcs and Angles</i>	9
9	Coordinate System <i>Def. of Real Line Axis & Abscissa of a Point, Def. of a System of a Plane, Coordinates of a Point & a Vector, Analytic Explanation of Vectors Equalities</i>	5
12	Scalar Product in a Plane <i>Definition, Properties, Other Expressions of a Scalar Product, Applications (Condition for Orthogonality, Distance from a Point to a Line, General Relation of Pythagoras, Recognizing the Set of Points (Locus))</i>	10
13	Equations and Inequalities <i>First Degree Equations in One Unknown (Numerical Coefficients, Parametric Coefficients), Equations Changed to First Degrees, Problem Situations. First Degree Inequalities in One Unknown, Sign of $ax + b$, Absolute Value of First Degree Inequalities, System of First Degree Inequalities, Problem Situations</i>	6
16	Equations of Straight Lines <i>Definition, Director Vector of a Straight Line, Parametric Representation, Cartesian Representation, Reduced Form, Parallelism Condition of 2 Straight Lines, Intersection of Straight Lines, Graphic Representation of a Straight Line</i>	10
15	Generalities about Functions <i>Domain of Definition, Even/Odd Function, Sense of Variation, Extremum, Representative Curve, Graphical Reading of a Function and its Table of Variations, Graphical Comparison of 2 Functions over an Interval, Graphical Resolution of Equations & Inequalities</i>	8
18	Statistics <i>Statistical Vocabulary, Calculation of Measures of Center (Mean, Median, Mode), Calculation of Measures of Spread (Range, Variance, Standard Deviation), Graphical Representations</i>	10

<p>21</p>	<p style="text-align: center;">Counting</p> <p><i>Basic Rules, Determination of a Plane, Relative Positions of a Straight Line and a Plane, Relative Positions of 2 Planes, Intersection of a Line and a Plane, Section of a Solid Cut by a Plane</i></p>	<p style="text-align: center;">5</p>
<p>22</p>	<p style="text-align: center;">Straight Lines and Planes</p> <p><i>Parallel Straight Lines, Parallel Straight Line and a Plane, Parallel Planes, Projection on a Plane Parallel to a Given Direction</i></p>	<p style="text-align: center;">3</p>