

Mathematics Curriculum Overview: Türkiye

Grade	Number	Algebra	Data	Spatial Sense, Geometry & Measurement	Financial Literacy	Social-Emotional Learning & Mathematical Processes
	Operations with Natural Numbers - Exponential Expressions: <i>natural number,</i> <i>exponent, base</i> - Order of Operations - Distributive property and Common Multiple Property - Natural Number Problems					
	Multiplications and Times - Multiplications and Times: <i>multiplier, time,</i> <i>divisor</i>			Angles : adjacent angle, complementary angle, supplementary angle, adjacent complementary angle, adjacent supplementary angle, opposite angle		

- Prime NumbersArea Measurement- Least Common Multiple and Greatest Common- Area of shapes with parallel sides- Area of shapes with parallel sides- Units of land area: acre, decare, hectare	òrade 6	- Least Common Multiple and Greatest Common	Algebraic Expressions - Algebraic Expression: <i>variable, coefficient, term, constant term, like terms</i> - Modelling Algebraic Expressions	 Data Collection and Evaluation Creating Research Questions Data Collection and Evaluation: column chart, frequency chart, axes Data Analysis Mean and Range Comparing data in two datasets 	- Area of shapes with parallel sides	n/a	n/a
Sets - Creating Research Questions				- Data Collection and Evaluation: column chart,	Circle		
SetsSets: set, element-element numbers, union-Algebraic Expressions- Creating Research QuestionsCreating Research Questions- Sets: set, element-element numbers, union-Algebraic Expressions- Data Collection and Evaluation: column chart,Circle	irade 6	- Integers: positive and negative integer, order of	constant term, like terms		circle, circular region	n/a	n/a
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SetsSets- Creating Research Questions- Creating Research Questio		Operations with Fractions		- Comparing data in two datasets	-		
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Grade 7	 Operations with Integers communicative-, associative-, identity-, closure-, and distributive property Addition and subtraction of integers Multiplication and division of integers, Repeated multiplication of integers Integer problems Rational Numbers Recognizing and showing rational numbers on numerical axis Decimals and rational numbers Comparison and order in rational numbers Operations with rational numbers Direct proportion Inverse proportion Inverse proportion Problems in proportion Percentage Percentage calculations Problems of percentage 	Algebraic Expressions - Operations with Algebraic Expressions - Number Pattern Equality and Equation - Equality and Equation: <i>equality, degree, unknown, equation</i> - Conservation of Equality and Equation - Problems and Solutions of First Degree Equation with One Variable	Data Analysis - Line Graph - Mean, Median and Mode - Pie Chart - Different Demonstrations of Data	Lines and Angles - Angle Bisector - Two parallel lines cut by a transversal: alternate interior angles, corresponding angles, interior angles, and exterior angles Polygons - Regular polygons and properties of polygons - Rectangles - Shapes with parallel sides - Trapezoid and rhombus - Area of rhombus and trapezoid - Area problems Circle and Disk - Central angle and arcs in circle - Radius and diameter - Area of disk and circular segment Different Views of Objects : front, top, right side, left side, rear, and bottom	n/a	n/a
Grade 8	 Multiplications and Times Multiplying positive integers Greatest common factors Least common multiples Exponential Expressions Analysis of decimal notations Very large and small numbers Scientific notation of very large and small numbers Square Roots Identifying non-perfect square numbers between two natural numbers Calculations with square roots Square roots of decimals Irrational and real numbers 	Linear Equation - First degree equation with one variable - Coordinate system - Linear relations: independent variable, dependent variable, linear equation - Linear graphs - Real life situations with linear relations - Slope of a straight line: slope Inequalities - First degree inequalities with one variable: greater than or equal to, less than or equal to	Data Analysis - Interpretation of line and column graphs - Visualization of data with appropriate graphs Probability of Simple Event - Determination of probable events: experiment, output, event, probable event, sample space - Prediction the likelihood of events: identities, impossible events	 Triangles Median Angle bisector Orthocenter of triangles: right triangle, hypotenuse Relations of triangles' sides Geometric objects Relations of angles with triangles' sides Drawing of triangles, Pythagorean relation Congruency and Similarity ratio of similarity Transformation Geometry Translation: image Reflection: symmetry axis Geometric Objects Right prisms: base Right circular cylinder: height Surface area of right circular cylinder Volume of right circular cylinder Elements and development of right pyramid Elements and development of right cone 	n/a	n/a
Grade 9	Logic - Propositions and compound propositions: proposition, compound proposition, not/negation {~ or '}, and {∧}, or {V}, eitheror {⊻}, De Morgan's laws, conditional proposition/if {⇒}, converse, contrapositive, two-way conditional proposition/if and only if {⇔}, for all {∀}, there exists {∃}, open proposition, definition, axiom, theorem, proof, hypothesis, statement, truth value	Equation and Inequalities - Number sets: natural, whole, rational-, irrational-, real numbers - Divisibility rules: GCF, LCM - First-degree equations and inequalities: unknown, variable, equation, equation degree, inequality, solution set, absolute value, intervals of real numbers - Exponential expressions and equations: exponential expression, base, power, square roots,	Data - Measures of central tendency and dispersion: <i>data, discrete data, continuous data, arithmetic mean, median, mode, range, maximum value, minimum value</i> - Visualization of data with graphics: <i>line graph, column graph, pie chart, group number, group width,</i>	Triangles - Basic concepts of triangles: <i>angle, triangle, side, interior</i> <i>angle, exterior angle, triangle inequality, isosceles triangle,</i> <i>equilateral triangle, right-angled triangle</i> - Congruency and similarity of triangles: <i>congruency, side-</i> <i>angle-side</i> {A.S.A}, <i>side-side-side</i> {S.S.S}, <i>angle-side-angle</i> {A.S.A}, <i>angle-angle</i> {A.A}, <i>similarity, ratio of similarity,</i> <i>secant</i> - Elements of triangles: <i>bisector, interior bisector, exterior</i> <i>bisector, median, altitude, orthocenter, perpendicular</i>	n/a	n/a

	- Basic concepts in sets. set, element, empty set, subset, finite set, infinite set, equal set, proper set - Operations in sets: union, intersection, universal	rational power - Applications of equation and inequalities: ratio, proportion, direct proportion, inverse proportion, percentage	histogram	bisector, centroid - Right triangle and trigonometry: Pythagorean theorem, Euclid's theorem, trigonometrical ratio - Area of triangle: base, height, area)
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1. Adopted from: The Ontario Science and Technology Curriculum, (2022), https://www.dcp.edu.gov.on.ca/en/curriculum/science-technology & Math (Gr. 1-8) and Math (Gr. 9-12) Curricula of the Turkish Ministry of National Education (2023): http://mufredat.meb.gov.tr/Programlar.aspx

2. Strand; Subtheme: key concepts