		BYOM 7 th grade Syllabus	
Lesson #		Торіс	Hours
		Unit 1. Building of a mathematical theory	9
1-3	1	Mathematical model of real problem	1
	2	Basic ingredients for a mathematical model	1
	3	Basic ingredients for a mathematical model	1
4-9	4	Methods of building mathematical theory	1
	5	Some methods of mathematical proof	1
	6	Some methods of mathematical proof	1
	7	Logical conclusion. Venn Diagram	1
	8	Logical conclusion	1
	9	Logical mistakes	1
		Unit 2. Divisibility	17
10-17	10	Divisibility and its properties	1
	11	Divisibility and its properties	1
	12	Prime numbers	1
	13	Prime numbers	1
	14	Division and remainders	1
	15	Division and remainders	1
	16	Euclid's Algorithm	1
	17	Euclid's Algorithm	1
18-26	18	Divisibility of integers	1
	19	Classification of integers by modulo	1
	20	Classification of integers by modulo	1
	21	Modulo Arithmetic	1
	22	Modulo Arithmetic	1
	23	Modulo Arithmetic	1
	24	Solving problems with modulo	1
	25	Solving problems with modulo	1
		Unit 3. Algebraic expressions	7
27-29	26	Rational numbers	1
	27	Arithmetic operations and equivalent manipulations	1
	28	Arithmetic operations and equivalent manipulations	1
30-33	29	Manipulating algebraic sums	1
	30	Manipulating algebraic sums	1
	31	Manipulating algebraic products	1
	32	Manipulating algebraic products	1
		Unit 4. Introduction to Polynomials	34
34-37	33	Power with a natural exponent	1
	34	Properties of power with a natural exponent	1

	35	Properties of power with a natural exponent	1
	36	Properties of power with a natural exponent	1
38-46	37	Monomials	1
	38	Monomials	1
	39	Polynomials	1
	40	Polynomials	1
	41	Adding and subtracting polynomials	1
	42	Adding and subtracting polynomials	1
	43	Multiplying a monomial by a polynomial	1
	44	Multiplying polynomials	1
	45	Multiplying polynomials	1
47-54	46	Square of sums and differences	1
	47	Square of sums and differences	1
	48	Difference of squares	1
	49	Difference of squares	1
	50	Cube of sums and differences	1
	51	Cube of sums and differences	1
	52	Sum and difference of two cubes	1
	53	Sum and difference of two cubes	1
55-67	54	Factoring using distributive property	1
	55	Factoring using distributive property	1
	56	Grouping methods	1
	57	Grouping methods	1
	58	Grouping methods	1
	59	Special products and Factorization of Polynomials	1
	60	Special products and Factorization of Polynomials	1
	61	Special products and Factorization of Polynomials	1
	62	Factorization methods	1
	63	Factorization methods	1
	64	Factorization methods	1
	65	Solving problems using factorization	1
	66	Solving problems using factorization	1
		Unit 5. Introduction to the Functions	10
68-72	67	Relations as functions	1
	68	Relations as functions	1
	69	Identifying Functions	1
	70	Identifying Functions	1
	71	Function and cryptography	1
73-77	72	Direct proportion	1
	73	Linear function and its graph	1
	74	Linear function and its graph	1
	75	Piecewise linear function	1

	76	Piecewise linear function	1
		Unit 6. Linear equations and inequalities	10
78-83	77	Linear equations	1
	78	Linear equations	1
	79	Absolute value equations	1
	80	Absolute value equations	1
	81	Solving linear equations in integers	1
	82	Solving linear equations in integers	1
84-87	83	Linear inequalities	1
	84	Linear inequalities	1
	85	Absolute value inequalities	1
	86	Absolute value inequalities	1
		Unit 7. Combinatorics and Probability	13
88-91	87	Counting Variations	1
	88	Counting Variations	1
	89	Combinations with repetitions	1
	90	Combinations with repetitions	1
92-95	91	Ways of organizing information	1
	92	Ways of organizing information	1
	93	Statistical characteristics	1
	94	Statistical characteristics	1
96-100	95	Intro to probability	1
	96	Intro to probability	1
	97	Ways of counting probability	1
	98	Ways of counting probability	1
	99	Ways of counting probability	1