GRADE 7	BUILD YOUR OWN MATH SYLLABUS	
Lesson #	Торіс	# of Lessons
	Quarter I	
	<b>Construction of a Mathematical Theory</b>	
1	Building a math model	1
2	Basic ingredients for a mathematical model	1
3	Building a math model. Practice.	1
4	Methods of building a mathematical theory	1
5	Methods of mathematical proof	1
6	Methods of mathematical proof	1
8	Logical conclusion. Venn Diagrams. Logical conclusions	1
o 9	Logical errors	1
5	Divisibility	T
10	Divisibility and its properties	1
11	Prime numbers	1
12	Unique prime factorization	1
13	Division and remainders	1
14	Division and remainders	1
15	Euclid's Algorithm	1
16	Euclid's Algorithm	1
17	Divisibility of integers	1
18	Classification of integers by modulus	1
19	Classification of integers by modulus	1
20	Properties of comparisons	1
21	Modulo Arithmetic	1
22	Modulo Arithmetic Modulo Arithmetic	1
23 24	Solving problems with congruency	1
24	Solving problems with congruency	1
23	Quarter I Total	25
		23
	Quarter II	
	Algebraic Expressions	
26	Rational numbers	1
27	Arithmetic properties and equivalent manipulations	1
28	Arithmetic properties and equivalent manipulations	1
29	Manipulating algebraic sums	1
30	Manipulating algebraic sums	1
31	Manipulating algebraic products	1
32	Manipulating algebraic products	1
22	Introduction to Polynomials	1
33 34	Powers with natural exponents 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
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 46	Multiplying polynomials Square of sums and differences	1
46	Square of sums and differences	1
48	Difference of squares	1
49	Difference of squares	1
50	Cube of sums and differences	1
	🛞 Quarter II Total	25

	Quarter III	
51	Cube of sums and differences	1
52	Sum and difference of two cubes	1
53	Sum and difference of two cubes	1
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
	Introduction to Functions	
67	Relations as functions	1
68	Relations as functions	1
69	Identifying functions	1
70	Identifying functions	1
71	Function and cryptography	1
72	Direct proportion	1
73	Linear function and its graph	1
74	Linear function and its graph	1
75	Piecewise linear function	1
	Quarter III Total	25
	Quarter IV	
76	Quarter IV	1
76	Piecewise linear function	1
	Piecewise linear function Linear Equations and Inequalities	1
77	Piecewise linear function Linear Equations and Inequalities Linear equations	1
77 78	Piecewise linear function Linear Equations and Inequalities Linear equations Linear equations	1 1 1 1
77 78 79	Piecewise linear function Linear Equations and Inequalities Linear equations Linear equations Absolute value equations	1 1 1 1 1 1
77 78 79 80	Piecewise linear function Linear Equations and Inequalities Linear equations Linear equations Absolute value equations Absolute value equations	1 1 1 1 1 1 1
77 78 79 80 81	Piecewise linear function Linear Equations and Inequalities Linear equations Linear equations Absolute value equations Absolute value equations Solving linear equations in integers	1 1 1 1 1 1 1 1 1
77 78 79 80 81 82	Piecewise linear function Linear Equations and Inequalities Linear equations Linear equations Absolute value equations Absolute value equations Solving linear equations in integers Solving linear equations in integers	1 1 1 1 1 1 1 1 1 1
777 78 79 80 81 82 82 83	Piecewise linear function Linear Equations and Inequalities Linear equations Linear equations Absolute value equations Absolute value equations Solving linear equations in integers Solving linear equations in integers	1 1 1 1 1 1 1 1 1 1 1 1 1
777 788 799 800 811 822 833 833 834	Piecewise linear function Linear Equations and Inequalities Linear equations Linear equations Absolute value equations Absolute value equations Solving linear equations in integers Solving linear equations in integers Linear inequalities Linear inequalities	1 1 1 1 1 1 1 1 1 1 1 1 1 1
777 78 79 80 81 81 82 83 83 83 83 83	Piecewise linear function Linear Equations and Inequalities Linear equations Linear equations Absolute value equations Absolute value equations Solving linear equations in integers Solving linear equations in integers Linear inequalities Linear inequalities	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
777 788 799 800 811 822 833 833 834	Piecewise linear function Linear Equations and Inequalities Linear equations Linear equations Absolute value equations Absolute value equations Solving linear equations in integers Solving linear equations in integers Linear inequalities Linear inequalities Absolute value inequalities Absolute value inequalities	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
777 788 799 800 811 822 833 833 834 834 835 844 855 866	Piecewise linear function Linear Equations and Inequalities Linear equations Linear equations Absolute value equations Absolute value equations Solving linear equations in integers Solving linear equations in integers Linear inequalities Linear inequalities Absolute value inequalities Absolute value inequalities	1 1 1 1 1 1 1 1
777 788 799 800 811 822 833 832 833 834 835 835 855 866 855 866	Piecewise linear function Linear Equations and Inequalities Linear equations Linear equations Absolute value equations Absolute value equations Solving linear equations in integers Solving linear equations in integers Linear inequalities Linear inequalities Absolute value inequalities Absolute value inequalities Combinatorics and Probability	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
777 78 799 800 810 821 822 833 832 833 834 835 835 835 835 836 835 835 835 835 835 835 835 835 835 835	Piecewise linear function Linear Equations and Inequalities Linear equations Linear equations Absolute value equations Absolute value equations Solving linear equations in integers Solving linear equations in integers Linear inequalities Linear inequalities Absolute value inequalities Absolute value inequalities Combinatorics and Probability Counting variations	
777 78 79 80 80 81 82 82 83 83 83 83 83 83 83 83 83 85 85 88 85 88 85 88 85 88 85 88 80	Piecewise linear function Linear Equations and Inequalities Linear equations Linear equations Absolute value equations Absolute value equations Solving linear equations in integers Solving linear equations in integers Linear inequalities Linear inequalities Linear inequalities Absolute value inequalities Absolute value inequalities Combinatorics and Probability Counting variations Counting variations	1 1 1 1 1 1 1 1
777 78 799 800 810 821 822 832 833 834 835 835 835 835 835 835 835 835 835 835	Piecewise linear function Linear Equations and Inequalities Linear equations Linear equations Absolute value equations Absolute value equations Solving linear equations in integers Solving linear equations in integers Linear inequalities Linear inequalities Linear inequalities Absolute value inequalities Absolute value inequalities Combinatorics and Probability Counting variations Combinations with repetitions	
777 78 79 80 80 81 82 82 83 83 83 83 83 83 83 83 83 83 83 83 83	Piecewise linear function Linear Equations and Inequalities Linear equations Linear equations Absolute value equations Absolute value equations Solving linear equations in integers Solving linear equations in integers Solving linear equations in integers Linear inequalities Linear inequalities Linear inequalities Absolute value inequalities Absolute value inequalities Combinatorics and Probability Counting variations Counting variations Combinations with repetitions Combinations with repetitions Combinations with repetitions	
777 78 799 800 811 822 822 833 833 834 835 835 835 835 835 836 835 835 835 835 835 835 835 835 835 835	Piecewise linear function Linear Equations and Inequalities Linear equations Linear equations Absolute value equations Absolute value equations Solving linear equations in integers Solving linear equations in integers Solving linear equations in integers Linear inequalities Linear inequalities Linear inequalities Absolute value inequalities Absolute value inequalities Combinatorics and Probability Counting variations Combinations with repetitions Combinations with repetitions Ways of organizing information	
777 78 79 80 81 81 82 83 83 83 83 83 83 83 83 83 83 83 83 83	Piecewise linear function Linear Equations and Inequalities Linear equations Linear equations Linear equations Absolute value equations Absolute value equations in integers Solving linear equations in integers Solving linear equations in integers Linear inequalities Linear inequalities Absolute value inequalities Absolute value inequalities Counting variations Counting variations Combinatorics and Probability Counting variations Combinations with repetitions Combinations with repetitions Ways of organizing information Statistical characteristics	
777 78 79 80 80 81 82 82 83 83 83 83 83 83 83 83 83 83 83 83 83	Piecewise linear function Linear Equations and Inequalities Linear equations Linear equations Linear equations Absolute value equations Absolute value equations in integers Solving linear equations in integers Solving linear equations in integers Linear inequalities Linear inequalities Absolute value inequalities Absolute value inequalities Combinatorics and Probability Counting variations Combinations with repetitions Combinations with repetitions Vays of organizing information Statistical characteristics	
777 78 799 800 811 822 832 833 834 834 835 835 836 835 836 835 836 835 836 835 836 835 836 835 836 835 836 835 836 836 837 837 837 837 837 837 837 838 839 90 839 90 839 90 839 90 839 90 839 839 839 839 839 839 839 839 839 839	Piecewise linear function Linear Equations and Inequalities Linear equations Linear equations Absolute value equations Absolute value equations Solving linear equations in integers Solving linear equations in integers Linear inequalities Linear inequalities Linear inequalities Absolute value inequalities Absolute value inequalities Combinatorics and Probability Counting variations Combinations with repetitions Combinations with repetitions Vays of organizing information Statistical characteristics Linear inequality Linear equations Linear equations Linear equations Linear inequality Linear inequality Linear inequality Linear inequalities Linear inequalities Linear inequalities Linear inequalities Linear inequalities Linear inequality Linear equations Linear equations Linear equations Linear equations Linear inequality Linear equations Linear inequality Linear inequality Linear equations Linear inequality Linear equations Linear inequality Linear equations Linear inequality Linear equations Linear inequality Linear inequality Linear equations Linear inequality Linear equations Linear equations Linear inequality Linear equations Linear inequality L	
777 78 799 800 811 822 832 833 834 835 835 835 835 835 835 836 835 835 835 835 835 835 835 835 835 835	Piecewise linear function Linear Equations and Inequalities Linear equations Linear equations Linear equations Absolute value equations Absolute value equations in integers Solving linear equations in integers Solving linear equations in integers Linear inequalities Linear inequalities Absolute value inequalities Absolute value inequalities Combinatorics and Probability Counting variations Combinations with repetitions Combinations with repetitions Vays of organizing information Statistical characteristics Intro to Probability Intro to Probability	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
777 78 799 800 811 822 832 833 834 835 835 836 835 836 835 836 835 836 837 837 837 837 837 837 837 837 837 837	Piecewise linear function Linear Equations and Inequalities Linear equations Linear equations Linear equations Absolute value equations Absolute value equations in integers Solving linear equations in integers Solving linear equations in integers Linear inequalities Linear inequalities Absolute value inequalities Absolute value inequalities Absolute value inequalities Combinatorics and Probability Combinations Combinations with repetitions Combinations with repetitions Combinations with repetitions Solving of organizing information Statistical characteristics Intro to Probability Ways of counting probability Ways of counting probability	
777 78 79 80 80 81 82 83 83 83 83 83 83 83 83 83 83 83 83 83	Piecewise linear function  Linear Equations and Inequalities  Linear equations  Linear equations  Absolute value equations  Absolute value equations  Solving linear equations in integers  Solving linear equations in integers  Linear inequalities  Linear inequalities  Linear inequalities  Absolute value inequalities  Absolute value inequalities  Combinatorics and Probability  Combinations with repetitions  Combinations with repetitions  Solving of organizing information  Statistical characteristics  Intro to Probability  Ways of counting probability  Ways of counting probability  Ways of counting probability	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
777         78         79         80         81         82         83         84         85         86         87         87         87         87         90         91         92         93         94         95         96         97         98         97         98         97         98         97         98         97         98         97         98         99         99	Piecewise linear function  Linear Equations and Inequalities  Linear equations  Linear equations  Absolute value equations  Absolute value equations in integers  Solving linear equations in integers  Solving linear equations in integers  Linear inequalities  Linear inequalities  Absolute value inequalities  Absolute value inequalities  Combinatorics and Probability  Combinations with repetitions  Combinations with repetitions  Statistical characteristics  Intro to Probability  Ways of counting probability	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
777 78 79 80 80 81 82 83 83 83 83 83 83 83 83 83 83 83 83 83	Piecewise linear function  Linear Equations and Inequalities  Linear equations  Linear equations  Absolute value equations  Absolute value equations  Solving linear equations in integers  Solving linear equations in integers  Linear inequalities  Linear inequalities  Linear inequalities  Absolute value inequalities  Absolute value inequalities  Combinatorics and Probability  Combinations with repetitions  Combinations with repetitions  Solving of organizing information  Statistical characteristics  Intro to Probability  Ways of counting probability  Ways of counting probability  Ways of counting probability	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

