



Build Your Own Math Syllabus		
Lesson #	Topic	# of Lessons
	Quarter I	
	Construction of a Mathematical Theory	
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
7	Logical conclusion. Venn Diagrams.	1
8	Logical conclusions	1
9	Logical errors	1
	Divisibility	
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	1
23	Modulo Arithmetic	1
24	Solving problems with congruency	1
25	Solving problems with congruency	1
	 Quarter I Total	25
	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
	Introduction to Polynomials	
33	Powers with natural exponents	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
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
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
	 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	Piecewise linear function	1
	Linear Equations and Inequalities	
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
83	Linear inequalities	1
84	Linear inequalities	1
85	Absolute value inequalities	1
86	Absolute value inequalities	1
	Combinatorics and Probability	
87	Counting variations	1
88	Counting variations	1
89	Combinations with repetitions	1
90	Combinations with repetitions	1
91	Ways of organizing information	1
92	Ways of organizing information	1
93	Statistical characteristics	1
94	Statistical characteristics	1
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
100	Review	1
	 Quarter IV Total	25
		