

Adam Spencer's Big Book of Numbers mapped to the NSW Syllabus for the Australian Curriculum

No guarantees this is comprehensive (see the notes below).

Published on: MathsClass.net

Have I missed something? Submit it here:

[SUBMIT ADDITION](#)

This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

Chapter	Page	Section	NSW Syllabus	NSW Outcome	Descriptor	Content	Australian Curriculum	Notes
1	4	The Basics	MA3-4NA	orders, reads and represents integers of any size and describes properties of whole numbers	MA3-4NA-2	Identify and describe factors and multiples of whole numbers and use them to solve problems	ACMNA122	
2	6	Irrational Numbers	MA4-5NA	operates with fractions, decimals and percentages	MA4-5NA-8	Investigate the concept of irrational numbers, including π	ACMNA186	
3	10	Euler's Formula for Polyhedra	MA3-14MG	identifies three-dimensional objects, including prisms and pyramids, on the basis of their properties, and visualises, sketches and constructs them given drawings of different views				Euler's Formula is no explicitly mentioned in the syllabus.
3	10	Pythagorean Triads	MA4-16MG	applies Pythagoras' theorem to calculate side lengths in right-angled triangles, and solves related problems	MA4-16MG-1	Investigate Pythagoras' theorem and its application to solving simple problems involving right-angled triangles	ACMMG222	
3	12							Fibonacci gets no mention in our syllabus. Alas.
3	12	(check if a number is divisible by	MA4-9NA	operates with positive-integer and zero indices of numerical bases	MA4-9NA-1	Investigate index notation and represent whole numbers as products of powers of prime numbers	ACMNA149	
4	14	$4 = 2 \times 2$	MA4-9NA	operates with positive-integer and zero indices of numerical bases	MA4-9NA-1	Investigate index notation and represent whole numbers as products of powers of prime numbers	ACMNA149	
17	66	On and on and on and on and ...	MA4-5NA	operates with fractions, decimals and percentages	MA4-5NA-6	Investigate terminating and recurring decimals	ACMNA184	
21	83	Triangular Numbers	MA3-4NA	orders, reads and represents integers of any size and describes properties of whole numbers	MA3-4NA-2	Identify and describe factors and multiples of whole numbers and use them to solve problems	ACMNA122	
22	86	Piece of Pi	MA3-15MG	manipulates, classifies and draws two-dimensional shapes, including equilateral, isosceles and scalene triangles, and describes their properties	MA3-15MG-2	Describe translations, reflections and rotations of two-dimensional shapes		
22	86	Piece of Pi	MA4-12MG	calculates the perimeters of plane shapes and the circumferences of circles	MA4-12MG-2	Investigate the concept of irrational numbers, including π	ACMNA186	
25	100	Perfect Square	MA4-9NA	operates with positive-integer and zero indices of numerical bases	MA4-9NA-2	Investigate and use square roots of perfect square numbers	AMNCA150	
29	116	Limping Triangle	MA4-16MG	applies Pythagoras' theorem to calculate side lengths in right-angled triangles, and solves related problems				
30	120	Primorial Soup	MA3-4NA	orders, reads and represents integers of any size and describes properties of whole numbers	MA3-4NA-2	Identify and describe factors and multiples of whole numbers and use them to solve problems	ACMNA122	
35	138	Approximation of Pi	MA4-12MG	calculates the perimeters of plane shapes and the circumferences of circles	MA4-12MG-2	Investigate the concept of irrational numbers, including π	ACMNA186	
36	144	Two Dice	MA4-21SP	represents probabilities of simple and compound events	MA4-21SP-1	Construct sample spaces for single-step experiments with equally likely outcomes	ACMSP167	
37	146	Hexagonal Numbers	MA3-4NA	orders, reads and represents integers of any size and describes properties of whole numbers	MA3-4NA-2	Identify and describe factors and multiples of whole numbers and use them to solve problems	ACMNA122	
39	156	Reciprocals Revisited	MA4-5NA	operates with fractions, decimals and percentages	MA4-5NA-3	Multiply and divide fractions and decimals using efficient written strategies and digital technologies	ACMNA154	
50	200	Seeing Through Geometry	MA4-16MG	applies Pythagoras' theorem to calculate side lengths in right-angled triangles, and solves related problems	MA4-16MG-1	Investigate Pythagoras' theorem and its application to solving simple problems involving right-angled triangles	ACMMG222	
51	202	You Can Handle The Proofs!	MA4-9NA	operates with positive-integer and zero indices of numerical bases	MA4-9NA-1	Investigate index notation and represent whole numbers as products of powers of prime numbers	ACMNA149	

Adam Spencer's Big Book of Numbers mapped to the NSW Syllabus for the Australian Curriculum

No guarantees this is comprehensive (see the notes below).

Published on: MathsClass.net

Have I missed something? Submit it here:

[SUBMIT ADDITION](#)

This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

Chapter	Page	Section	NSW Syllabus	NSW Outcome	Descriptor	Content	Australian Curriculum	Notes
51	203	(exponential growth)	MA5.1-7NA	graphs simple non-linear relationships	MA5.1-7NA-2	Explore the connection between algebraic and graphical representations of relations such as simple quadratics, circles and exponentials using digital technologies as appropriate	ACMNA239	
60	240	(interior angle of an equilateral t	MA3-15MG	manipulates, classifies and draws two-dimensional shapes, including equilateral, isosceles and scalene triangles, and describes their properties	MA3-15MG-1	Classify two-dimensional shapes and describe their features		
61	243	Puzzling Pentominoes	MA3-9MG	selects and uses the appropriate unit and device to measure lengths and distances, calculates perimeters, and converts between units of length	MA3-9MG-3	Connect decimal representations to the metric system	ACMMG137	
66	262	Palindromic and Triangular	MA3-4NA	orders, reads and represents integers of any size and describes properties of whole numbers	MA3-4NA-2	Identify and describe factors and multiples of whole numbers and use them to solve problems	ACMNA122	Palindromic numbers used to be in the syllabus.
67	266	Pierre De Fermat's Last Theorem	MA4-16MG	applies Pythagoras' theorem to calculate side lengths in right-angled triangles, and solves related problems	MA4-16MG-1	Investigate Pythagoras' theorem and its application to solving simple problems involving right-angled triangles	ACMMG222	
72	287	Interior Angles	MA5.2-14MG	calculates the angle sum of any polygon and uses minimum conditions to prove triangles are congruent or similar	MA5.2-14MG	Apply logical reasoning, including the use of congruence and similarity, to proofs and numerical exercises involving plane shapes	ACMMG244	
78	310	The 12th Triangle	MA3-4NA	orders, reads and represents integers of any size and describes properties of whole numbers	MA3-4NA-2	Identify and describe factors and multiples of whole numbers and use them to solve problems	ACMNA122	
90	359	A 270° Triangle?	MA4-17MG	classifies, describes and uses the properties of triangles and quadrilaterals, and determines congruent triangles to find unknown side lengths and angles	MA4-17MG-3	Demonstrate that the angle sum of a triangle is 180° and use this to find the angle sum of a quadrilateral	ACMMG166	
96	382	Measurement Of The Circle	MA4-12MG	calculates the perimeters of plane shapes and the circumferences of circles	MA4-12MG-2	Investigate the concept of irrational numbers, including π	ACMNA186	
97	386	On and on and on and on and ...	MA4-5NA	operates with fractions, decimals and percentages	MA4-5NA-6	Investigate terminating and recurring decimals	ACMNA184	
97	386	Reciprocals Revisited	MA4-5NA	operates with fractions, decimals and percentages	MA4-5NA-3	Multiply and divide fractions and decimals using efficient written strategies and digital technologies	ACMNA154	
99	394	Fract-tastic	MA5.3-6NA	performs operations with surds and indices	MA5.3-6NA-1	Define rational and irrational numbers and perform operations with surds and fractional indices	ACMNA264	
Notes								
Some match directly, many are applications of.								
I have not captured every mention of triangular numbers, for example.								
Many parts of the book could fit into more than one syllabus outcome								