# Comparison of AC v8.4 to v9.0

Year 3: Mathematics

#### Note:

• the key applies to the content descriptions only

• v8.4 content descriptions may have been reordered to align with v9.0 content descriptions.

	Version 8.4	Version 9.0		
	Achievement standard	Achievement standard		
By the end of Year 3, students recognise the connection between addition and subtraction and solve problems using efficient strategies for multiplication. They model and represent unit fractions. They represent money values in various ways. Students identify symmetry in the environment. They match positions on maps with given information. Students recognise angles in real situations. They interpret and compare data displays. Students count to and from 10 000. They classify numbers as either odd or even. They recall addition and multiplication facts for single-digit numbers. Students correctly count out change from financial transactions. They continue number patterns involving addition and subtraction. Students use metric units for length, mass and capacity. They tell time to the nearest minute. Students make models of three-dimensional objects. Students conduct chance experiments and list possible outcomes. They conduct simple data investigations for categorical variables.		different ways to assist in calculations. Students extend and use single-digit addition and related subtraction facts and apply additive strategies to model a solve problems involving two- and three-digit numbers. They use mathematic modelling to solve practical problems involving single-digit multiplication and division, recalling multiplication facts for twos, threes, fours, fives and tens, ar using a range of strategies. Students represent unit fractions and their multipl in different ways. They make estimates and determine the reasonableness of financial and other calculations. Students find unknown values in number sentences involving addition and subtraction. They create algorithms to investigate numbers and evolve simple patterns.		
		Students conduct guided statistical investigations involving categorical discrete numerical data, and interpret their results in terms of the conterrecord, represent and compare data they have collected. Students use activities, observation or experiment to identify and describe outcomes likelihood of everyday events explaining reasoning. They conduct reperchance experiments and discuss variation in results.	ext. They e practical and the	
Strands	Content descriptions	Content descriptions	Strands	
	recognise, model, represent and order numbers to at least 10 000 ACMNA052	recognise, represent and order natural numbers using naming and writing conventions for numerals <u>beyond 10 000</u> AC9M3N01 Moved from Year 4		
	model and represent unit fractions including $\frac{1}{2}$ , $\frac{1}{4}$ , $\frac{1}{3}$ , $\frac{1}{5}$ and their multiples to a complete whole ACMNA058	recognise and represent unit fractions including $\frac{1}{2}$ , $\frac{1}{3}$ , $\frac{1}{4}$ , $\frac{1}{5}$ and $\frac{1}{10}$ and their multiples in different ways; combine fractions with the same denominator to complete the whole AC9M3N02		
	apply place value to partition, rearrange and regroup numbers to at least 10 000 to assist calculations and solve problems ACMNA053	add and subtract <u>two- and three-digit numbers</u> using place value to partition, rearrange and regroup numbers to assist in calculations without a calculator AC9M3N03		
	represent and solve problems involving multiplication using efficient mental and written strategies and appropriate digital technologies ACMNA057	multiply and divide one- and two-digit numbers, representing problems using number sentences, diagrams and arrays, and using a variety of calculation strategies AC9M3N04		
Number		estimate the quantity of objects in collections and make estimates when solving problems to determine the reasonableness of calculations AC9M3N05	Number	
		use <u>mathematical modelling</u> to solve practical problems involving additive and multiplicative situations including financial contexts; formulate problems using number sentences and choose calculation strategies, using digital tools where appropriate; interpret and communicate solutions in terms of the situation AC9M3N06		
		follow and create algorithms involving a sequence of steps and decisions to investigate numbers; describe any emerging patterns AC9M3N07	-	
	investigate the conditions required for a number to be odd or even and identify odd and even numbers ACMNA051 <b>Moved to Year 4</b>			
	represent money values in multiple ways and count the change required for simple transactions to the nearest five cents ACMNA059 <b>Moved to Measurement</b>			
	recognise and explain the connection between addition and subtraction ACMNA054	recognise and explain the connection between addition and subtraction as inverse operations, apply to partition numbers and find unknown values in number sentences AC9M3A01 <b>Moved from Year 2</b>	Ngebra	
Algebra	recall addition facts for single-digit numbers and related subtraction facts to develop increasingly efficient mental strategies for computation ACMNA055 <b>Moved to Year 2</b>	extend and apply knowledge of addition and subtraction facts <u>to 20</u> to develop efficient mental strategies for computation with larger numbers without a calculator AC9M3A02		
A	recall multiplication facts of two, three, five and ten and related division facts ACMNA056	recall and demonstrate proficiency with multiplication facts for 3, <mark>4</mark> , 5 and 10; extend and apply facts to develop the related division facts AC9M3A03		
	describe, continue, and create number patterns resulting from performing addition or subtraction ACMNA060 <b>Moved to Year 2</b>			



For all Queensland schools



### ACiQ v9.0

Key	same/refined	removed	new	moved
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Note:

• the key applies to the content descriptions only

• v8.4 content descriptions may have been reordered to align with v9.0 content descriptions.

	Version 8.4	Version 9.0		
Measurement		identify which metric units are used to measure everyday items; use measurements of familiar items and known units to make estimates AC9M3M01	_	
	measure, order and compare objects using familiar metric units of length, mass and capacity ACMMG061	measure and compare objects using familiar metric units of length, mass and capacity, and instruments with labelled markings AC9M3M02		
	tell time to the minute and investigate the relationship between units of time ACMMG062	recognise and use the relationship between formal units of time including days, hours, minutes and seconds to estimate and compare the duration of events AC9M3M03 <b>Moved from Year 4</b>	Measurement	
	tell time to the minute and investigate the relationship between units of time ACMMG062	describe the relationship between the hours and minutes on analog and digital clocks, and read the time to the nearest minute AC9M3M04	Mea	
	identify angles as measures of turn and compare angle sizes in everyday situations ACMMG064	identify angles as measures of turn and compare angles with right angles in everyday situations AC9M3M05 <b>Moved from Year 4</b>		
	represent money values in multiple ways and count the change required for simple transactions to the nearest five cents ACMNA059 <b>Moved from Number</b>	recognise the relationships between dollars and cents and represent money values in different ways AC9M3M06		
Geometry	make models of three-dimensional objects and describe key features ACMMG063	make, compare and classify objects, identifying key features and explaining why these features make them suited to their uses AC9M3SP01 <b>Moved from Year 2</b>	Space	
	create and interpret simple grid maps to show position and pathways ACMMG065	interpret and create two dimensional representations of familiar environments, locating key landmarks and objects relative to each other AC9M3SP02		
	identify symmetry in the environment ACMMG066 Moved to Year 4	CMMG066 Moved to Year 4		
Statistics	collect data, organise into categories and create displays using lists, tables, picture graphs and simple column graphs, with and without the use of digital technologies ACMSP069	acquire data for categorical and <u>discrete numerical variables</u> to address a question of interest or purpose by observing, collecting and accessing data sets; record the data using appropriate methods including frequency tables and spreadsheets AC9M3ST01	Statistics	
	interpret and compare data displays ACMSP070	create and compare different graphical representations of data sets including using software where appropriate; interpret the data in terms of the context AC9M3ST02		
	identify questions or issues for categorical variables. Identify data sources and plan methods of data collection and recording ACMSP068	conduct <mark>guided statistical investigations</mark> involving the collection, representation and interpretation of data for categorical <u>and discrete</u> <u>numerical variables</u> with respect to questions of interest AC9M3ST03		
Probability		identify practical activities and everyday events involving chance; describe possible outcomes and events as 'likely' or 'unlikely' and identify some events as 'certain' or 'impossible' explaining reasoning AC9M3P01 <b>Moved from Year 2</b>	Probability	
	conduct chance experiments, identify and describe possible outcomes and recognise variation in results ACMSP067	conduct repeated chance experiments; identify and describe possible outcomes, record the results, recognise and discuss the variation AC9M3P02	Prot	

#### Considerations for planning for the first year of implementation

In the initial year of implementing the Australian Curriculum: Mathematics v9.0, teachers need to consider the implications of content changes as they transition from v8.4.

The table below:

- identifies changes between v8.4 and v9.0 that may influence the sequence of students' learning
- outlines considerations for planning teaching and learning programs for the first year of implementation.

Year 2 content in v8.4	Year 3 content in v9.0	Considerations
recognise, model, represent and order numbers to at least 1000 ACMNA027	recognise, represent and order natural numbers using naming and writing conventions for numerals <u>beyond 10 000</u> AC9M3N01 <b>Moved from Year 4</b>	The following v8.4 Year 4 content description has been moved to Year 3 v9.0. recognise, represent and order numbers to at least tens of thousands ACMNA072 In v9.0, Year 4 students transition from recognising, modelling, representing and ordering numbers to at least 1000 to working with numbers beyond 10 000. This is an increase in complexity. Teaching and learning programs should provide opportunities for students to build on their place value knowledge to by first recognising, representing and ordering numbers to at least 10 000 before extending students knowledge to numbers beyond 10 000.
count and order small collections of Australian coins and notes according to their value ACMNA034	use mathematical modelling to solve practical problems involving additive and multiplicative situations including financial contexts; formulate problems using number sentences and choose calculation strategies, using digital tools where appropriate; interpret and	In v9.0 financial contexts need to be provided for mathematical modelling. Students need to understand the language, processes, concepts and relationships relevant to the selected context. For example, purchasing items from a shop and making transactions require an understanding of language and concepts such as shopkeeper/vendor, purchaser, cost, price, total amount, receipt, exchange of money and change.

#### ACiQ v9.0

Year 2 content in v8.4	Year 3 content in v9.0	Considerations
	communicate solutions in terms of the situation AC9M3N06	
explore the connection between addition and subtraction ACMNA029	recognise and explain the connection between addition and subtraction as inverse operations, apply to partition numbers and find unknown values in number sentences AC9M3A01 <b>Moved</b> <b>from Year 2</b>	Exploring the connection between addition and subtraction was content included in Year 2 v8.4. As this content has moved to Year 3 v9.0, teaching and learning programs should provide opportunities for students to revise and consolidate conceptual understanding.
describe the features of three- dimensional objects ACMMG043	make, compare and classify objects, identifying key features and explaining why these features make them suited to their uses AC9M3SP01 <b>Moved from</b> <b>Year 2</b>	Describing the features of three-dimensional objects was content included in Year 2 v8.4. As this content has moved to Year 3 v9.0, teaching and learning programs should provide opportunities for students to revise and consolidate conceptual understanding.
identify practical activities and everyday events that involve chance. Describe outcomes as 'likely' or 'unlikely' and identify some events as 'certain' or 'impossible' ACMSP047	identify practical activities and everyday events involving chance; describe possible outcomes and events as 'likely' or 'unlikely' and identify some events as 'certain' or 'impossible' explaining reasoning AC9M3P01 <b>Moved from</b> <b>Year 2</b>	Identifying activities and events that involve chance, describing outcomes as 'likely' or 'unlikely' and identifying some events as 'certain' or 'impossible' was content included in Year 2 v8.4. As this content has moved to Year 3 v9.0, teaching and learning programs should consider opportunities for students to revise and consolidate conceptual understanding.

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