

Downloaded from
<https://k10outline.scsa.wa.edu.au/home/teaching/curriculum-browser/mathematics-v8/year-9> on 22/07/2024 check website for latest version.



School Curriculum
and Standards
Authority

The Authority

Kindergarten to Year 10

Years 11 and 12

Student

 Extranet Login

[Home](#)

[Principles](#) ▾

[Teaching](#) ▾

[Assessing](#) ▾

[Policy](#) ▾

[Re](#)

You are here > [K-10 Outline](#) > [Teaching](#) > [Western Australian Curri](#)

Year 9 SyllabusTest

[Download Curriculum as PDF](#)

Year Level Description

Filters



Show/Hide Curriculum

- ☒ Year level descriptors
- ☒ Content Descriptions
- ☒ Achievements Standards
- ☒ Icons

Year Levels

- ☒ Select All

Strands

- ☒ Select All
- ☒ Statistics and Probability
- ☒ Measurement and Geometry
- ☒ Number and Algebra

General Capabilities

- ☒ Select All
- ☒ Literacy
- ☒ Numeracy
- ☒ Information and Communication Technology (ICT) capability

Year 9 Syllab

Year Level Descri

The proficiency str
reasoning are an i
strands: number an
probability. The pro
within the content a
provide the languag
mathematics. The a
proficiencies.

At this year level:

- **understanding**
equations, simpli
relative frequenc
right-angle triang
- **fluency** includes
expressing numb
developing famili
calculating areas
- **problem-solvin**
involving surface
factors to similar
collecting data fr
- **reasoning** includ
and using statisti
investigating sim

- ✔ Critical and creative thinking
- ✔ Personal and social capability
- ✔ Ethical understanding
- ✔ Intercultural understanding


Number and Algebra

REAL NUMBERS

Solve problems involving direct proportion. Explore the relationship between graphs and equations corresponding to simple rate problems [\(ACMNA208\)](#)

 Literacy

 Numeracy

 Critical and creative thinking

Apply index laws to numerical expressions with integer indices [\(ACMNA209\)](#)

 Numeracy

Express numbers in scientific notation [\(ACMNA210\)](#)


 Numeracy

MONEY AND FINANCIAL MATHEMATICS

Solve problems involving simple interest
([ACMNA211](#))

 Literacy

 Numeracy

 Critical and creative thinking

PATTERNS AND ALGEBRA

Extend and apply the index laws to variables using positive integer indices and the zero index ([ACMNA212](#))

 Numeracy


Apply the distributive property to the expansion of algebraic expressions including binomials collect like terms where appropriate ([ACMNA213](#))

 Numeracy

LINEAR AND NON-LINEAR RELATIONSHIPS


Find the distance between two points located on the Cartesian plane using a range of strategies, including graphing software
[\(ACMNA214\)](#)

 Numeracy

 Information and Communication Technology (ICT) capability

Find the midpoint and gradient of a line segment (interval) on the Cartesian plane using a range of strategies, including graphing software
[\(ACMNA294\)](#)


 Numeracy

 Information and Communication Technology (ICT) capability

Sketch linear graphs

using the coordinates of
two points and solving
linear equations
([ACMNA215](#))


 Numeracy


 Critical and creative
thinking

Graph simple non-linear
relations with and
without the use of
technologies and solve
simple related equations
([ACMNA296](#))

 Literacy

 Numeracy

 Information and
Communication Technology
(ICT) capability

 Critical and creative
thinking

Year 9 Achievement

Number and Algebra

At Standard, students

index laws to number
binomial expansion
plane and the gradient
non-linear relations

Measurement and Geometry

Students interpret
triangles. Students
trigonometric ratios
area of right prisms
trigonometry to find

Statistics and Probability

Students calculate
two-step experiments
techniques for collecting
construct histogram
position of the mean
describe and interpret

The proficiency strands **understanding, fluency, problem-solving** content across the three content strands: number and algebra, proficiencies reinforce the significance of working mathematically or developed. They provide the language to build in the development achievement standards reflect the content and encompass the

At this year level:

- **understanding** includes describing the relationship between expressions and explaining the use of relative frequencies to angle triangles
- **fluency** includes applying the index laws to expressions with outcomes for experiments, developing familiarity with calculators, shapes and surface areas of prisms
- **problem-solving** includes formulating and modelling practical problems, applying ratio and scale factors to similar figures, solving problems using data from secondary sources to investigate an issue
- **reasoning** includes following mathematical arguments, evaluating situations, developing strategies in investigating similarity and

[Principles](#)

[Teaching](#)

[Assessing](#)

[Policy](#)

[Resources](#)

Subscribe to our monthly K–10 Circular

wa.gov.au 