

Downloaded from

<https://k10outline.scsa.wa.edu.au/home/teaching/curriculum-browser/mathematics-v8/year-10> on 22/10/2021 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 10 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 10 Sylla

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**
finding unknowns
equations of rela
in financial conte
experiments
- **fluency** includes
of strategies to s
data sets
- **problem-solving**
range of prisms t
using application
find solutions to s
independence of
- **reasoning** inclu
similarity, interpr

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


comparing data s

Number and Algebra

MONEY AND FINANCIAL MATHEMATICS

Connect the compo
interest formula to
repeated applicatio
simple interest usir
appropriate digital
technologies
[\(ACMNA229\)](#)

 Numeracy

 Information and
Communication Technr
(ICT) capability

PATTERNS AND ALGEBRA

Factorise algebraic
expressions by taki
out a common alge
factor [\(ACMNA230\)](#)


 Numeracy

Simplify algebraic products and quotients using index laws
[\(ACMNA231\)](#)

 Numeracy

Apply the four operations to simple algebraic fractions with numerical denominators
[\(ACMNA232\)](#)

 Numeracy

 Critical and creative thinking

Expand binomial products and factorise monic quadratic expressions using a variety of strategies
[\(ACMNA233\)](#)

 Numeracy

Substitute values into formulas to determine unknowns
[\(ACMNA234\)](#)

 Numeracy

LINEAR AND NON-LINEAR RELATIONSHIPS

Solve problems involving linear equations, including those derived from formulas
[\(ACMNA235\)](#)


 Numeracy

Solve linear inequalities and graph their solutions on a number line
[\(ACMNA236\)](#)

 Numeracy

Solve linear simultaneous equations using algebraic and graphical techniques including using digital technology [\(ACMNA237\)](#)

 Numeracy

 Information and Communication Technology (ICT) capability

Solve problems involving

parallel and
perpendicular lines
([ACMNA238](#))


 Literacy

 Numeracy

Explore the connections
between algebraic and
graphical
representations of
relations such as straight lines,
quadratics, circles and
exponentials using
digital technology and
appropriate ([ACMNA239](#))

 Literacy

 Numeracy


 Information and
Communication Techno-
(ICT) capability

Solve linear equations
involving simple
algebraic fractions
([ACMNA240](#))

 Numeracy

Solve simple quadratic equations using a range of strategies
[\(ACMNA241\)](#)

 Numeracy

 Critical and creative thinking

Year 10 Achievement

Number and Algebra

At Standard, students show interest. They solve problems and make the connections between concepts. They expand binomial expressions. Students find unknowns using the four operations with integers, equations and pairs of similar figures.

Measurement and Geometry

Students solve surface area problems, recognise the relationships between angles, use deductive reasoning, use trigonometry and area and perimeter to calculate unknowns.

Statistics and Probability

Students compare ()
They describe bivar
describe statistical
statistical reports. S
assign probabilities
quartile ranges.

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 applying the four operations to algebra making the connection between equations of relations and their contexts and determining probabilities of two- and three-step
- **fluency** includes factorising and expanding algebraic expressions calculations to investigate the shape of data sets
- **problem-solving** includes calculating the surface area and volume finding unknown lengths and angles using applications of trigonometric solutions to simultaneous equations and inequalities and investigating
- **reasoning** includes formulating geometric proofs involving congruence statements and interpreting and comparing data sets.

[Principles](#)

[Teaching](#)

[Assessing](#)

[Policy](#)

[Resources](#)

Subscribe to our monthly K-10 Circular

wa.gov.au 

