

Downloaded from

<https://k10outline.scsa.wa.edu.au/home/teaching/curriculum-browser/mathematics-v8/year-8> on 06/06/2023 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 8 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 8 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** decimals, identify arithmetic, connect purpose of statist area
- **fluency** includes integers; recogni recurring decima evaluating perim dimensional obje
- **problem-solving** involving ratios, p using two-way ta
- **reasoning** includ reasonable, deriv

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

deduce properties of populations.

---

## Number and Algebra


### NUMBER AND PLACE VALUE

Use index notation and powers of ten to establish index laws with positive integral indices and zero index ([ACMNA183](#))

#### Numeracy

Carry out the four operations with rational numbers and integers using efficient mental and written strategies and appropriate digital technologies ([ACMNA183](#))

#### Numeracy

 Information and Communication Technology (ICT) capability

## REAL NUMBERS

---

Investigate terminating and recurring decimals  
([ACMNA184](#))

 Numeracy


Investigate the concept of irrational numbers including  $\pi$  ([ACMNA](#))


 Numeracy

Solve problems involving the use of percentages including percentage increases and decreases with and without digital technologies  
([ACMNA187](#))

 Literacy

 Numeracy

 Information and Communication Technology (ICT) capability


 Critical and creative thinking


Solve a range of

problems involving  
and ratios, with and  
without digital  
technologies  
[\(ACMNA188\)](#)

 Literacy

 Numeracy

 Information and  
Communication Techno  
(ICT) capability


 Critical and creativ  
thinking


## MONEY AND FINANCIAL MATHEMATICS

Solve problems involv  
profit and loss, with  
without digital  
technologies  
[\(ACMNA189\)](#)

 Literacy

 Numeracy

 Information and  
Communication Techno  
(ICT) capability

 Critical and creativ  
thinking

## PATTERNS AND ALGEBRA

Extend and apply the distributive law to the expansion of algebraic expressions ([ACMN](#)

 Numeracy

Factorise algebraic expressions by identifying numeric factors ([ACMNA191](#)

 Numeracy


Simplify algebraic expressions involving four operations ([ACMNA192](#))

 Numeracy

## LINEAR AND NON-LINEAR RELATIONSHIPS


Plot linear relations on the Cartesian plane with and without the aid of digital technology ([ACMNA193](#))

 Numeracy

 Information and  
Communication Technr  
(ICT) capability

Solve linear equation  
using algebraic and  
graphical technique  
Verify solutions by  
substitution ([ACMN](#))

 Numeracy

 Critical and creativ  
thinking

---

## Year 8 Achievement

### **Number and Alge**

At Standard, student  
percentages. They  
describe rational ar  
loss. Students make  
expressions. They u  
operations with inte  
solve linear equation

### **Measurement and**

Students solve problems involving the perimeter and area of triangles and quadrilaterals, and the circumference and area of circles and sectors. They also solve problems involving the perimeter and area of composite figures.

### **Statistics and Probability**

Students model a situation with a probability distribution, choose appropriate statistical measures, and interpret the results. They also choose appropriate statistical measures to describe a data set and calculate the standard deviation.

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

At this year level:

- **understanding** includes describing patterns involving indices and operations with algebra and arithmetic, connecting rules for statistical measures and explaining measurements of perimeter and area
- **fluency** includes calculating accurately with simple decimals and fractions including recurring decimals; factorising numbers and areas of common shapes and volumes of three-dimensional figures



- **problem-solving** includes formulating and modelling practical problems, calculating the perimeters of common shapes and using two-way tables and
- **reasoning** includes justifying the result of a calculation or estimation, using congruence to deduce properties of triangles

[Principles](#)

[Teaching](#)

[Assessing](#)

[Policy](#)

[Resources](#)

**Subscribe to our monthly K-10 Circular**

wa.gov.au 