# Resource in focus – Mathematics Stage 4

## Learning intentions and success criteria

This resource showcases an excerpt from the Mathematics Stage 4 sample [Unit 4 – additive thinking – Lesson 7 – seeing double](https://education.nsw.gov.au/teaching-and-learning/curriculum/mathematics/planning-programming-and-assessing-mathematics-7-10/mathematics-7-10-units#:~:text=DOCX%20415%20KB)-,Stage%204,-These%20units%20and). Sample units are optional resources that present ‘one way’ of designing teaching and learning experiences and can be adopted and adapted for your school context.

The example below demonstrates **one way** that learning intentions and success criteria may be adapted to strengthen alignment with the overarching K–10 Mathematics Working mathematically outcome. It focuses on Lesson 7 – seeing double. This lesson sits within a 12-lesson unit.

**Note**: possible adaptations are represented in **bold red.**

### Unit 4 – additive thinking – Lesson 7 – seeing double

#### Example from resource

The suggested learning intention and success criteria below is from [Unit 4 – additive thinking – Lesson 7 – seeing double](https://education.nsw.gov.au/teaching-and-learning/curriculum/mathematics/planning-programming-and-assessing-mathematics-7-10/mathematics-7-10-units#:~:text=DOCX%20415%20KB)-,Stage%204,-These%20units%20and).

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| Learning intention | Success criteria |
| To be able to add and subtract fractions when one denominator is a multiple of another.  | * I can identify fractions where one denominator is a multiple of another.
* I can add and subtract fractions where one denominator is a multiple of another.
* I can use visual representations to aid in addition of fractions.
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The following syllabus outcomes are addressed in this lesson:

* develops understanding and fluency in mathematics through exploring and connecting mathematical concepts, choosing and applying mathematical techniques to solve problems, and communicating their thinking and reasoning coherently and clearly **MAO-WM-01**
* represents and operates with fractions, decimals and percentages to solve problems **MA4-FRC-C-01**
* generalises number properties to operate with algebraic expressions including expansion and factorisation **MA4-ALG-C-01**

#### Adopt and adapt

This example presents **one way** that a suggested learning intention and success criteria from a sample unit may be adapted.

**Scenario:** Hamed is a Mathematics teacher in a large, regional high school. From information gathered through formative assessment, he knows his Year 7 class includes students who require additional support with equivalent fractions. Hamed adapts the learning intention and success criteria provided in sample [Unit 4 – additive thinking – Lesson 7 – seeing double](https://education.nsw.gov.au/teaching-and-learning/curriculum/mathematics/planning-programming-and-assessing-mathematics-7-10/mathematics-7-10-units#:~:text=DOCX%20415%20KB)-,Stage%204,-These%20units%20and) based on his students’ needs.

Hamed modifies the learning intention to suit the range of understanding his students have of fractions. He also adjusts the success criteria to enable students to make connections with prior learning and identify key steps involved in achieving the learning intention.

Using the success criteria to explicitly identify the processes and products required to achieve the learning intention can support students to understand what they are learning and why it is important.

**Note:** this example shows how a suggested learning intention and success criteria from a sample unit can be adapted. It is essential teachers consider the context and individual needs of their class when adapting suggested learning intentions and success criteria. This can be guided by both formative and summative assessment data.

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| Learning intention | Success criteria |
| To be able to add and subtract fractions | * **I can compare and order fractions with different denominators by placing them on a number line**
* **I can explore and connect my understanding of equivalence to order fractions**
* I can identify fractions where one denominator is a multiple of another
* **I can add and subtract fractions with the same denominator**
* I can add and subtract fractions where one denominator is a multiple of another
* I can use visual representations to aid in addition of fractions
 |

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