

Dyscalculia: Fact Sheet for Studying at Home

For a person with dyscalculia who studies at home: completing assignments, sitting online assessments, and working without a teacher in the room. Also for the family member or support person helping them.

What is going on

Dyscalculia is a lifelong specific learning difficulty affecting how a person understands and works with numbers (British Dyslexia Association [BDA], 2025). The core difficulty is number sense: understanding the amount a number stands for, comparing sizes, and judging whether an answer makes sense (BDA, n.d.). Reading, writing and other subjects are often unaffected.

In study, this shows up as:

- **Following a method without understanding it.** The person learns the steps but cannot explain them or use them on a new problem (BDA, n.d.).
- **Weak recall of number facts** such as times tables, even after years of practice.
- **Counting on fingers**, or always counting from one.
- **Trouble judging size.** Is 0.5 bigger than 0.25? Is \$4,800 a lot or a little?
- **Trouble with time and money:** analogue clocks, timetables, budgets, receipts and planning how long tasks take (BDA, n.d.).
- **Trouble remembering number sequences** such as PINs and phone numbers.
- **Anxiety around numbers** and avoidance of any task involving them (BDA, n.d.).

Maths difficulty has many possible causes, including dyslexia, ADHD, dyspraxia and weak working memory. Dyscalculia is the form where the number processing itself is the barrier (BDA, n.d.).

Strengths to build on

- Often strong in reading, writing and verbal subjects.
- Some people manage algebra or geometry better than arithmetic (BDA, n.d.).
- Good at reasoning in words, stories and real-life situations.

Use them: explain number problems in words, use stories and real objects, and lean on reasoning instead of memorised facts.

Setting up to study at home

- **Calculator always available** (BDA, 2025).
- **A number line and a times table square** on the desk or wall (BDA, 2025).
- **Squared or grid paper** with large squares, to keep columns lined up (BDA, 2025).
- **Digital clock and timers** instead of analogue clocks.
- **A formula and method sheet** for the course, with worked examples, kept beside the work.
- **Concrete objects** for working through problems: coins, blocks, measuring cups.
- **Practice software** for number skills at a comfortable pace (BDA, 2025).
- **A calm start.** Begin each maths session with something already known, to settle anxiety.

Doing an assignment with numbers, step by step

1. **Read the problem and say it in words.** "I need to find out how much each person pays."

2. **Draw it or act it out.** A picture, a diagram, or real objects turn numbers into something visible.
3. **Estimate first, in words.** “About \$50 each” or “a bit less than half”. This gives a check for the final answer.
4. **Find a worked example** of the same type of problem in the course notes.
5. **Write one step per line** on squared paper, copying the structure of the worked example.
6. **Use the calculator** for every calculation.
7. **Compare the answer with the estimate.** If they are far apart, recheck the steps.
8. **Write the answer as a sentence**, with units: “Each person pays \$48.50.”
9. **Ask for help early** if a method does not make sense. Ask for a different explanation, not the same one repeated.

For assignments with budgets, data or graphs

- Put all numbers into a spreadsheet and let it calculate.
- Round large numbers and write their size in words beside them.
- Ask the teacher for a template or example of the finished table or graph.

Doing an assessment or exam at home

Before

- Arrange adjustments: calculator, extra time, a formula sheet, squared paper (BDA, 2025).
- Practise with past papers using the same tools.
- Prepare a one-page method sheet, if allowed.

During

- Read each question twice. Underline what is being asked for.
- Estimate before calculating.
- Show every step, one per line. Method often earns marks even when the final number is wrong.
- Skip number-heavy questions which cause panic, and come back to them.

After

- Note which question types caused trouble, to target practice.

When the person is stuck

What you notice	What to try	Why it helps
Does not know which operation to use	Draw the problem or act it out with objects. Ask “Are we joining, taking away, sharing or grouping?”	Turns an abstract question into a concrete action.
Numbers look jumbled on the page	Rewrite the problem on squared paper with space between each number.	Keeps place values lined up.
Answer seems wrong but cannot see why	Compare with the estimate. Check each line against the worked example.	Gives a reference point for “does this make sense?”
Forgot a times table or number fact	Use the times table square or calculator. Do not stop to memorise.	Number fact recall is the core difficulty. Tools remove it.
Panicking at the sight of numbers	Pause. Breathe. Start with a question already understood.	Anxiety blocks thinking. Early success reduces it.
Follows the method in the notes but not on a new problem	Find two worked examples of different types and compare what changes	Builds understanding of why each step happens

on a new problem	types and compare what changes.	happens.
Running out of time in timed work	Use digital timers with alarms. Request extra time as an adjustment.	Time judgement is part of the difficulty.
Confused by a large number	Write it in words beside the digits: "\$4,800, about five thousand dollars".	Gives the number a size the person relates to.

Tools which help

- Calculator (phone, computer or physical).
- Spreadsheets for any calculation-heavy work.
- Number line and times table square.
- Squared or graph paper.
- Digital clock, timers and alarms.
- Practice software and apps.
- Budgeting apps for money tasks.

Adjustments to ask your course provider for

In Australia, the Disability Standards for Education 2005 apply to schools, TAFE, universities and training providers. Providers must consult with the student and make reasonable adjustments (Department of Education, n.d.). Adjustments used for dyscalculia include (BDA, 2025; Australian Disability Clearinghouse on Education and Training [ADCET], n.d.-b):

- Calculator use in all assessments.
- Extra time for number-based tasks and exams.
- A formula sheet in exams.
- Squared paper.
- Worked examples and step-by-step guides.
- Small-group or one-to-one help with maths content.
- A quiet exam room.

A diagnosis is not required to receive support in many settings (BDA, 2025).

How a support person at home helps

- Use everyday objects, money and cooking to explain number ideas.
- Explain a method in a different way if the first way did not work.
- Stay calm and patient. Frustration increases number anxiety.
- Never quiz or test number facts.
- Praise reasoning and effort, not speed.

Avoid

- Mental arithmetic demands.
- Timed number drills.
- Saying "it is easy" or "remember it".
- Dense tables of numbers with no explanation.
- Percentages or fractions with no picture or example.

- Repeating the same explanation louder or slower.

Sources

Australian Disability Clearinghouse on Education and Training. (n.d.-b). *Inclusive teaching: Specific learning disability*. University of Tasmania. <https://www.adcet.edu.au/inclusive-teaching/specific-disabilities/specific-learning-disability>

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