

*This is general information for your knowledge and understanding of how to support students with learning disabilities. It is important to remember that Dyscalculia affects all people differently. Speak with the student and family to understand how Dyscalculia affects the student and their learning and environmental needs. It is not Tutor Doctor's role to suggest a learning disability is present in a student, diagnose learning disabilities, suggest a course of action with the school, or to suggest treatment for learning disabilities.*

## What is Dyscalculia?

Dyscalculia (dys-cal-cū-lee-a) is a learning disability that affects the ability to work with numbers and solve math problems/equations. It is a deficit in number sense that impacts a student's ability to understand, remember, or manipulate numbers and to conceptualize numbers as abstract concepts.

Dyscalculia is also called **Mathematics Learning Disability, Mathematics Disorder**. It is sometimes informally called "math dyslexia," although dyscalculia and dyslexia are not the same thing.

## What does Dyscalculia impact?

Dyscalculia can affect:

- Working memory
  - Such as:
    - Holding numbers in mind while doing problems with multiple steps
- Recollection of math facts
- Understanding of quantity
- Procedural aspects of math
  - Such as:
    - Lining up numbers correctly to solve a problem
    - Formulae
    - Remembering/completing the proper steps to solve a problem
    - Knowing when to apply their knowledge to solve a problem
- The ability to understand that a number is a symbol for a quantity
- Understanding of what numbers are or how they work. For example:
  - The student might not understand that the written word (seven) and the symbol (7) represent the same thing

## Strategies for Supporting Students Who Have Dyscalculia:

- Multi-sensory strategies
  - Use math manipulatives- have the student count the objects or copy a math problem using manipulatives so the student can see what the number or problem looks like.
  - Use sound- have the student clap or ring a bell and count the sounds to help them visualize the number they are working with.
- Use number lines, multiplication charts, images, and other visuals.
- Play math-related games.

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- Try strategies from all learning styles (see the Learning Styles Guide for ideas).
- Give concrete examples that connect math to real life.
- Use graph paper to keep numbers lined up.
- Draw bold, black borders around math problems to help the student focus on one problem at a time, fold worksheets, or cover the problems not being worked on with blank white paper.
- Clearly space problems on a page.