

## What is Dyscalculia



Think "maths dyslexia" and you most of the way there.

Dyscalculia is defined by a person's difficulty with numbers and arithmetical concepts. It's estimated (by people who are good at that sort of thing) that between 4% and 6% of the world's population has dyscalculia, but that only 1% has even heard of the disorder.

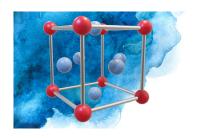
People with dyscalculia struggle to perform everyday tasks, such as remembering addresses and phone numbers, figuring a tip at a restaurant, or determining exactly what that "10% OFF!" sale will get them. We tend to transpose digits (reading 67 for 76), invert digits (reading 6 for 9), or just get plain confused (3 and 8 might look like the same symbol to a dyscalculic). All that, and we haven't even got to using numbers to do actual maths!

## Does Dyscalculia End at Maths?

Dyscalculia is a maths disorder, but the problems it causes do not stop at numbers. Dyscalculics often have difficulty when reading maps or trying to follow street directions. We generally don't get along well with the formal aspects of music education, such as sight-reading and theory. We are likely to have trouble with physical coordination, and as if that didn't make gym class hard enough, a lot of us can't remember the rules to games.

## Dyscalculia include:

- Difficulty working with numbers
- · Confused by math symbols
- Difficulty with basic facts (adding, subtracting, multiplying and dividing)
- Often will reverse or transpose numbers (36: 63)
- Difficulty with mental maths
- · Difficulty telling time
- Difficulty with directions (as for playing a game)
- Difficulty grasping and remembering maths concepts
- Poor memory for layout of things (for example, numbers on a clock)
- Limited strategic planning skills (like used in chess)



## Quick Test for Dyscalculia



The simplest way to check if a child is dyscalculic is to look at these points below. I sometimes see a number written down, but when I copy it, I write the numbers in the wrong order.

- 1. When using a phone, I dial numbers in the wrong order.
- 2. I cannot remember numbers even when I use them often such as telephone numbers that I dial a lot
- 3. When someone mentions odd and even numbers, I have to think very carefully to work out which is which.
- 4. When someone mentions odd and even numbers, I do not understand what they mean.
- 5. When I work out a maths question on the page, the working is always very messy
- 6. When I go abroad, I can never get the hang of foreign currency and always let someone else sort out the money. I never know what the equivalent is in British money.
- 7. When I get into a maths problem I often forget where I have got to and cannot finish it off.
- 8. The 24-hour clock always confuses me totally.
- 9. Sometimes when I am faced with a question that has to do with numbers I just cannot cope and become very anxious.
- 10. Sometimes I see signs like + or ÷ but I cannot remember what they are called. If someone says "divide" I cannot think of the symbol.
- 11. Sometimes I know the answer to a maths problem but cannot explain how I got to that answer.
- 12. Sometimes I forget the names of shapes like a triangle or a semi-circle.
- Most of the people I work with can use a calculator, but I never get the right answer.
- 13. Maths frightens me. I really do not understand it at all.
- 14.1 know there are problems which say, "if it takes a man 5 minutes to drive 10 miles, how long does it take him to drive 12 miles?" But I never have any idea how to do them even though other people in my class can.
- 15.1 know that everyone else in my class understands what "square root" means but I really have no idea.
- 16.I have never been able to subtract larger numbers.
- 17.I have never been able to do "times tables
- 18.I get really confused between the meaning of high numbers such as 10,000 and 9,999 and I cannot work out which one is higher.
- I find it really hard to copy a stream of numbers from a board onto paper.
- 19.1 do not understand percentages at all.
- 20.1 could never work in a shop because I could never work out how much change to give someone.
- 21.1 can't understand what fractions are all about.
- 22.1 always find adding up and taking away difficult.



If the answer is "yes" to half or more of these points (or in the case of a child, the points that are relevant to the child's age) there is every chance that the person taking it is dyscalculic.