

Mathematician of the Month January

Charles Dodgson, better known by his pen name Lewis Carroll, was the author of *'Alice's Adventures in Wonderland'*, its sequel *'Through the Looking Glass'* and many poems.

He was also a mathematician and lectured at Christ Church College, Oxford, where he worked predominantly in the field of mathematical logic.



Charles Dodgson 1832 - 1898

English Author,
Mathematician and Poet

	Prime	Not prime
Even	2	4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26
Not even	3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37, 41	1, 9, 15, 21, 25, 27, 33, 35, 39, 41, 45, 49

Dodgson invented the 'Carroll Diagram' which is named after him.



Consider these statements:

1. All cats are feline.
2. All felines are mammals.

Therefore, all cats are mammals.

This is logical reasoning.

'Alice's Adventures in Wonderland' was first published in 1865 and contains many mathematical references.

Tw'as brillig, and the slithy toves
Did gyre and gimble in the wabe:
All mimsy were the borogoves,
And the mome raths outgrabe.

"Beware the Jabberwock, my son!
The jaws that bite, the claws that catch!
Beware the Jubjub bird, and shun
The frumious Bandersnatch!"

Extract from 'Jabberwocky'
'Through the Looking-Glass'
Lewis Carroll, 1871



The caterpillar advises Alice to eat the mushroom to change size.

He tells her to keep her 'temper' (another way of telling her to keep her body sizes in proportion).

When Alice is 10 cm tall, her legs are 4 cm long.

To keep the correct proportion, how long should her legs be if she grows to:

- 80 cm tall
- 160 cm tall?