

# The convenience yield exists even in differential calculus

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## Abstract

In this paper, I describe how the convenience yield exists even in differential calculus.  
The paper ends with "The End"

## Introduction

Unbeknownst to many mathematicians, the **convenience yield** exists even in differential calculus.

In this paper, I describe how the convenience yield exists even in differential calculus.

## The convenience yield exists even in differential calculus

Consider, for example, the function

$$f(x) = \sqrt{a + \sqrt{b + \sqrt{c + x}}}$$

where  $a$ ,  $b$ ,  $c$  are constants.

There are many methods to find  $f'(x)$ . We consider two of them.

1. Using the chain rule on  $f(x)$ .
2. Removing the outermost radical by squaring both sides and then using the chain rule on  $f(x)^2$ .

Both methods above give us the same answer, but the second method is more convenient than the first.

Therefore, we conclude that the convenient yield exists even in differential calculus.

## The End