

# Liouville's Theorem (Differential algebra)

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Sber

January 14, 2025

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Field  $F$  is differential if it's equipped with the unary function  $'$  such that:

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Let  $F$  be the differential field. Then

- ▶  $b$  is called the logarithm of  $a$  if  $b' = \frac{a'}{a}$
- ▶  $b$  is called the exponent of  $a$  if  $a' = \frac{b'}{b}$

# What is integrability in elementary functions

Liouville's  
Theorem

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Basic definitions

What is  
integrability in  
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