Title

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Abstract

This is a simple example to showcase the Obsidian to LaTeX converter.

1 Introduction

This document demonstrates the conversion of Markdown notes to a LaTeX document, including internal links and embedded content.

2 Results

replace all double dollars with math blocks and parse with github syntax. Then in the logic recover the display equation from the fact that it is also its own paragraph. Here is some $\sum a_i$.

$$\sum_{i=1}^{k} A_i$$

$$\sum_{i=1}^{n} A_3$$

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We present the following lemma:

Lemma 1. *Every even integer greater than 2 can be expressed as the sum of two prime numbers.*

The main theorem is:

Theorem 2. *For every positive integer n , the sum of the first n odd integers is equal to n^2 .*

3 Proofs

Here is the proof for the main theorem. The proof is specifically for **??**. I may or may not follow from [1].

Proof. We proceed by induction.

Base case ($n = 1$): The sum of the first odd integer (1) is equal to 1^2 , which is true.

Inductive step: Assume that the sum of the first k odd integers is equal to k^2 . We want to show that the sum of the first $k + 1$ odd integers is equal to $(k + 1)^2$.

The sum of the first k odd integers is k^2 . The next odd integer is $(2k + 1)$. Therefore, the

□

References

[1] Mark Rudelson and Roman Vershynin. "On Sparse Reconstruction from Fourier and Gaussian Measurements". In: *Communications on Pure and Applied Mathematics* 61.8 (Aug. 2008), pp. 1025–1045. ISSN: 00103640, 10970312. DOI: 10.1002/cpa.20227. URL: https://onlinelibrary.wiley.com/doi/10.1002/cpa.20227 (visited on 02/27/2022).