## The Wonder That Is Pi

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2024-07-13 | 2024-07-25

This is a sequel to the blog "The Pi of Archimedes". We look at  $\pi$  as a number rather than the ratio of two lengths, and try to unravel how and why it is ubiquitous in mathematics.

$$\pi = 4(1 - \frac{1}{3} + \frac{1}{5} - \frac{1}{7} + \dots)$$

$$\frac{1}{\pi} = \frac{\sqrt{8}}{9801} \sum_{n=0}^{\infty} \frac{(4n)! \left[1103 + 26390n\right]}{(n!)^4 396^{4n}}$$

Figure 1: Pi expressed by two very different equations.

## Introduction

## Acknowledgements

## Feedback

Please email me your comments and corrections.