

Googolplex Written Out

Wolfgang H. Nitsche

A stylized graphic of a vinyl record. The text "volume 1000" is written in a bold, black, sans-serif font at the top. The text "8631" is written in a bold, black, sans-serif font in the center of the record. The record itself is represented by two concentric circles of small, black, pill-shaped indentations, with a black center hole. The entire graphic is set against a white background.

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Wolfgang H. Nitsche

Stanford University

A stylized graphic of a vinyl record. The text "volume 1000" is written in a bold, black, sans-serif font at the top. The text "8631" is written in a similar font, rotated 90 degrees counter-clockwise, in the center of the record. The record itself is represented by two concentric circles of small, black, pill-shaped indentations, with a white center.

Foreword

In 1940, the mathematician Edward Kasner published the book "Mathematics and the Imagination", in which he popularized the words googol and googolplex which his nephew suggested as names for big numbers.

The number googol has been defined as 1 followed by a hundred zeros:

[illegible]

The much larger number googolplex has been defined as 1 followed by a googol zeros. While this number can easily be written as

$$\text{googolplex} = 10^{\text{googol}} = 10^{(10^{100})}$$

using the exponential notation, it has often been claimed that the number googolplex is so large that it can never be written out in full.

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Wolfgang H. Nitsche
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www.GoogolplexWrittenOut.com

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