

# Googolplex Written Out

# Wolfgang H. Nitsche

**volume 91731**



# Googolplex Written Out

Wolfgang H. Nitsche

Stanford University

**volume 91731**

# 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.

[illegible]

Wolfgang H. Nitsche  
August 2013  
www.GoogolplexWrittenOut.com



|  |
|--|
|  |
|--|

\_\_\_\_\_

|  |
|--|
|  |
|--|

\_\_\_\_\_

|  |
|--|
|  |
|--|

---

\_\_\_\_\_

|  |
|--|
|  |
|--|



\_\_\_\_\_

|  |
|--|
|  |
|--|

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

|  |
|--|
|  |
|--|

\_\_\_\_\_

|  |
|--|
|  |
|--|

|  |
|--|
|  |
|--|

|  |
|--|
|  |
|--|



|  |
|--|
|  |
|--|

|  |
|--|
|  |
|--|

\_\_\_\_\_

\_\_\_\_\_

|  |
|--|
|  |
|--|





|  |
|--|
|  |
|--|

\_\_\_\_\_

\_\_\_\_\_

|  |
|--|
|  |
|--|

\_\_\_\_\_

\_\_\_\_\_

|  |
|--|
|  |
|--|

\_\_\_\_\_

|  |
|--|
|  |
|--|

\_\_\_\_\_

|  |
|--|
|  |
|--|

\_\_\_\_\_

|  |
|--|
|  |
|--|

|  |
|--|
|  |
|--|

---

|  |
|--|
|  |
|--|

|  |
|--|
|  |
|--|





|  |
|--|
|  |
|--|



\_\_\_\_\_

|  |
|--|
|  |
|--|

---



|  |
|--|
|  |
|--|

---

|  |
|--|
|  |
|--|

|  |
|--|
|  |
|--|



|  |
|--|
|  |
|--|

|  |
|--|
|  |
|--|

















|  |
|--|
|  |
|--|

---

page 74

|  |
|--|
|  |
|--|

|  |
|--|
|  |
|--|

\_\_\_\_\_

|  |
|--|
|  |
|--|

|  |
|--|
|  |
|--|

\_\_\_\_\_

|  |
|--|
|  |
|--|

\_\_\_\_\_

|  |
|--|
|  |
|--|

|  |
|--|
|  |
|--|

\_\_\_\_\_

---



|  |
|--|
|  |
|--|



|  |
|--|
|  |
|--|





|  |
|--|
|  |
|--|



|  |
|--|
|  |
|--|

|  |
|--|
|  |
|--|



|  |
|--|
|  |
|--|





\_\_\_\_\_

\_\_\_\_\_





\_\_\_\_\_

---

\_\_\_\_\_





|  |
|--|
|  |
|--|

|  |
|--|
|  |
|--|

\_\_\_\_\_

|  |
|--|
|  |
|--|

|  |
|--|
|  |
|--|

|  |
|--|
|  |
|--|

[illegible]

|  |
|--|
|  |
|--|

\_\_\_\_\_

|  |
|--|
|  |
|--|

|  |
|--|
|  |
|--|

|  |
|--|
|  |
|--|

|  |
|--|
|  |
|--|

|  |
|--|
|  |
|--|

|  |
|--|
|  |
|--|



|  |
|--|
|  |
|--|

|  |
|--|
|  |
|--|

|  |
|--|
|  |
|--|



|  |
|--|
|  |
|--|

|  |
|--|
|  |
|--|



\_\_\_\_\_



|  |
|--|
|  |
|--|

\_\_\_\_\_

|  |
|--|
|  |
|--|

\_\_\_\_\_

|  |
|--|
|  |
|--|



|  |
|--|
|  |
|--|































|  |
|--|
|  |
|--|

\_\_\_\_\_

\_\_\_\_\_





\_\_\_\_\_

|  |
|--|
|  |
|--|

|  |
|--|
|  |
|--|

|  |
|--|
|  |
|--|

|  |
|--|
|  |
|--|

\_\_\_\_\_

\_\_\_\_\_

|  |
|--|
|  |
|--|

\_\_\_\_\_

---





|  |
|--|
|  |
|--|



---



|  |
|--|
|  |
|--|

---

















|  |
|--|
|  |
|--|

\_\_\_\_\_

|  |
|--|
|  |
|--|









|  |
|--|
|  |
|--|



page 197

\_\_\_\_\_

|  |
|--|
|  |
|--|

|  |
|--|
|  |
|--|

|  |
|--|
|  |
|--|

---



\_\_\_\_\_





\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

page 211

---

|  |
|--|
|  |
|--|















|  |
|--|
|  |
|--|

|  |
|--|
|  |
|--|

|  |
|--|
|  |
|--|





|  |
|--|
|  |
|--|

\_\_\_\_\_

[illegible]

[illegible]

\_\_\_\_\_



























\_\_\_\_\_

---









































|  |
|--|
|  |
|--|

|  |
|--|
|  |
|--|

\_\_\_\_\_

---



|  |
|--|
|  |
|--|

---

|  |
|--|
|  |
|--|

|  |
|--|
|  |
|--|

|  |
|--|
|  |
|--|

---

\_\_\_\_\_

---

|  |
|--|
|  |
|--|





|  |
|--|
|  |
|--|

\_\_\_\_\_

---

|  |
|--|
|  |
|--|

|  |
|--|
|  |
|--|

\_\_\_\_\_

|  |
|--|
|  |
|--|









|  |
|--|
|  |
|--|

[illegible]

|  |
|--|
|  |
|--|

|  |
|--|
|  |
|--|

|  |
|--|
|  |
|--|











\_\_\_\_\_









\_\_\_\_\_

\_\_\_\_\_





\_\_\_\_\_

\_\_\_\_\_





|  |
|--|
|  |
|--|

---

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



---

\_\_\_\_\_

|  |
|--|
|  |
|--|



|  |
|--|
|  |
|--|

\_\_\_\_\_

\_\_\_\_\_

|  |
|--|
|  |
|--|













\_\_\_\_\_

|  |
|--|
|  |
|--|

---

\_\_\_\_\_

---

|  |
|--|
|  |
|--|

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

[illegible]







|  |
|--|
|  |
|--|

|  |
|--|
|  |
|--|

|  |
|--|
|  |
|--|



---

\_\_\_\_\_

\_\_\_\_\_

---

\_\_\_\_\_



|  |
|--|
|  |
|--|

|  |
|--|
|  |
|--|

[illegible]

\_\_\_\_\_

---

|  |
|--|
|  |
|--|

\_\_\_\_\_

\_\_\_\_\_

|  |
|--|
|  |
|--|

|  |
|--|
|  |
|--|

\_\_\_\_\_



|  |
|--|
|  |
|--|

|  |
|--|
|  |
|--|

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

|  |
|--|
|  |
|--|

|  |
|--|
|  |
|--|

|  |
|--|
|  |
|--|



|  |
|--|
|  |
|--|

---

|  |
|--|
|  |
|--|

|  |
|--|
|  |
|--|

---

---

---

|  |
|--|
|  |
|--|

|  |
|--|
|  |
|--|

\_\_\_\_\_

---

|  |
|--|
|  |
|--|

---

---

|  |
|--|
|  |
|--|

\_\_\_\_\_



\_\_\_\_\_

\_\_\_\_\_

---

\_\_\_\_\_

\_\_\_\_\_

|  |
|--|
|  |
|--|

[illegible][illegible]

(This page is intentionally left blank.)