

# Sample Document Using the Glossaries Package With Xindy

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## 1 Karl Friedrich Gauss

This is a section on **Karl Friedrich Gauss**. This section spans several pages.

This paragraph has been shoved to the bottom of the page using a rule. This paragraph spans a page break for testing purposes to ensure the glossary entry

in this paragraph has the correct location. Here's the glossary entry: **Gaussian function**. Check that the location is correct.

This page talks about **Gaussian integers**. Since it's the principle definition, the user-defined hyperbfit format is used.

The section on **Gauss** ends here.

## 2 Series Expansions

This section is about series expansions. It mentions **Colin Maclaurin** and **Brook Taylor**. It also discusses **Taylor's theorem** which is related to the **Taylor series**. The **Maclaurin series** is a special case of the **Taylor series**.

## 3 Archimedes' principle

This section discusses **Archimedes' principle** which was introduced by **Archimedes of Syracuse**.

## 4 Another section

This section covers **Ernst Mach** who introduced the **Mach number**. It also mentions **André-Marie Ampère** after whom the SI unit **ampere** is named. It then discusses **Sir Francis Galton** and **Thomas Robert Malthus**. Finally it mentions **John Loudon McAdam**.

This page discusses [Quinn McNemar](#) who introduced [McNemar's test](#) and [Giuseppe Peano](#) who discovered [Peano's curve](#).

## Glossary

### A

#### ampere

SI unit of electric current named after [Ampère](#). [\[1\]](#)

#### Ampère, André-Marie

French mathematician and physicist. [\[1\]](#), [\[2\]](#)

#### Archimedes of Syracuse

Greek mathematician. [\[1\]](#), [\[2\]](#)

#### Archimedes' principle

Principle that if a body is submerged in a fluid it experiences upthrust equal to the weight of the displaced fluid. Named after [Archimedes](#). [\[1\]](#)

### G

#### Galton, Sir Francis

English anthropologist. [\[1\]](#)

#### Gauss, Karl Friedrich

German mathematician. [\[1\]](#)–[\[2\]](#)

#### Gaussian function

A function of the form:

$$f(x) = a \exp\left(-\frac{(x-b)^2}{2c^2}\right)$$

for some constants  $a$ ,  $b$  and  $c$ . [\[1\]](#)

#### Gaussian integer

Complex number where both real and imaginary parts are integers. [\[1\]](#)

### M

#### Mach number

Ratio of the speed of a body in a fluid to the speed of sound in that fluid named after [Mach](#). [\[1\]](#)

## Mach, Ernst

Czech/Austrian physicist and philosopher. [\[1\]](#), [\[2\]](#)

## Maclaurin series

Series expansion. [\[1\]](#), [\[2\]](#), *see* [Taylor's theorem](#)

## Maclaurin, Colin

Scottish mathematician best known for the [Maclaurin series](#). [\[1\]](#)

## Malthus, Thomas Robert

English mathematician, sociologist and classicist. [\[1\]](#)

## McAdam, John Loudon

Scottish engineer. [\[1\]](#)

## McNemar, Quinn

Mathematician who introduced [McNemar's test](#). This entry has the number list suppressed.

## McNemar's test

A nonparametric test introduced by [McNemar](#) in 1947. [\[1\]](#), [\[2\]](#)

## P

## Peano, Giuseppe

Italian mathematician. [\[1\]](#), [\[2\]](#)

## Peano's curve

A space-filling curve discovered by [Peano](#). [\[1\]](#)

## T

## Taylor series

Series expansion. [\[1\]](#), *see* [Taylor's theorem](#)

## Taylor, Brook

English mathematician. [\[1\]](#)

## Taylor's theorem

Theorem expressing a function  $f(x)$  as the sum of a polynomial and a remainder:

$$f(x) = f(a) + f'(a)(x - a) + f''(a)(x - a)^2/2! + \cdots + R_n$$

If  $n \rightarrow \infty$  the expansion is a [Taylor series](#) and if  $a = 0$ , the series is called a [Maclaurin series](#). [\[1\]](#)