

# Sample Document Using the Glossaries Package With Xindy

Nicola Talbot

January 19, 2017

## 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

One

in this paragraph has the correct location. Here's the glossary entry: [Gaussian function](#).

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. Three

#### Ampère, André-Marie

French mathematician and physicist. Three, Four

#### Archimedes of Syracuse

Greek mathematician. Three, Four

#### 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. Three

### G

#### Galton, Sir Francis

English anthropologist. Three

#### Gauss, Karl Friedrich

German mathematician. One–Three

#### 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  $c$ . Two

#### Gaussian integer

Complex number where both real and imaginary parts are integers. Two

### M

#### Mach number

Ratio of the speed of a body in a fluid to the speed of sound in that fluid named after Mach. Three

**Mach, Ernst**

Czech/Austrian physicist and philosopher. [Three](#), [Four](#)

**Maclaurin series**

Series expansion. *see Taylor's theorem*, [Three](#), [Five](#)

**Maclaurin, Colin**

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

**Malthus, Thomas Robert**

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

**McAdam, John Loudon**

Scottish engineer. [Three](#)

**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. [Four](#), [Five](#)

**P****Peano, Giuseppe**

Italian mathematician. [Four](#), [Five](#)

**Peano's curve**

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

**T****Taylor series**

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

**Taylor, Brook**

English mathematician. [Three](#)

**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](#). [Three](#)