Moduldokumentation

Modul Einführung in die Analysis (eana)

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2016

Inhalt

[1 Einleitung 3](#_Toc464386548)

[1.1 Einleitung 3](#_Toc464386549)

[1.2 Lernziele 3](#_Toc464386550)

[1.3 Prüfungen 3](#_Toc464386551)

[2 Woche 1 & 2 4](#_Toc464386552)

[2.1 Repetition 4](#_Toc464386553)

[2.1.1 Mengen 4](#_Toc464386554)

[2.1.2 Betrag 4](#_Toc464386555)

[2.2 Folgen 5](#_Toc464386556)

[2.2.1 Definition 5](#_Toc464386557)

[2.2.2 Beispiele 5](#_Toc464386558)

[2.2.3 Beschränktheit 6](#_Toc464386559)

[2.2.4 Konvergenz 6](#_Toc464386560)

[2.2.5 Anwendung in Matlab 10](#_Toc464386561)

[2.2.6 Monotonie 11](#_Toc464386562)

[2.2.7 Spezielle Beispiele 14](#_Toc464386563)

[2.2.8 Stetige Verzinsung 14](#_Toc464386564)

[2.3 Reihen 15](#_Toc464386565)

[2.3.1 Definition 15](#_Toc464386566)

[2.3.2 Anwendung in Matlab 18](#_Toc464386567)

[3 Woche 3 19](#_Toc464386568)

[3.1 Stetigkeit 19](#_Toc464386569)

[3.1.1 Funktionsgrenzwert 19](#_Toc464386570)

[3.1.2 Beispiele 19](#_Toc464386571)

[3.1.3 Anwendung in Matlab 21](#_Toc464386572)

[3.1.4 Stetigkeit 21](#_Toc464386573)

[3.1.5 Beispiele 22](#_Toc464386574)

[3.1.6 Eigenschaft stetiger Funktionen 23](#_Toc464386575)

[4 Woche 4 24](#_Toc464386576)

[4.1 Differentialrechnungen 24](#_Toc464386577)

[4.1.1 Motivation freier Fall 24](#_Toc464386578)

[4.1.2 Differenzierbarkeit 26](#_Toc464386579)

[4.1.3 Beispiele 27](#_Toc464386580)

[5 Woche 5 29](#_Toc464386581)

# Einleitung

## Einleitung

Dieses Dokument stellt die Moduldokumentation für das Modul eana dar. Allfällige Unterlagen sind im Modulordner zu finden.

## Lernziele

Das Modul beinhaltet folgende Lernziele:

* Zahlenfolgen und Konvergenz
* Ableitungen von Funktionen und Anwendungen
* Integration
* Ausgewählte Funktionen

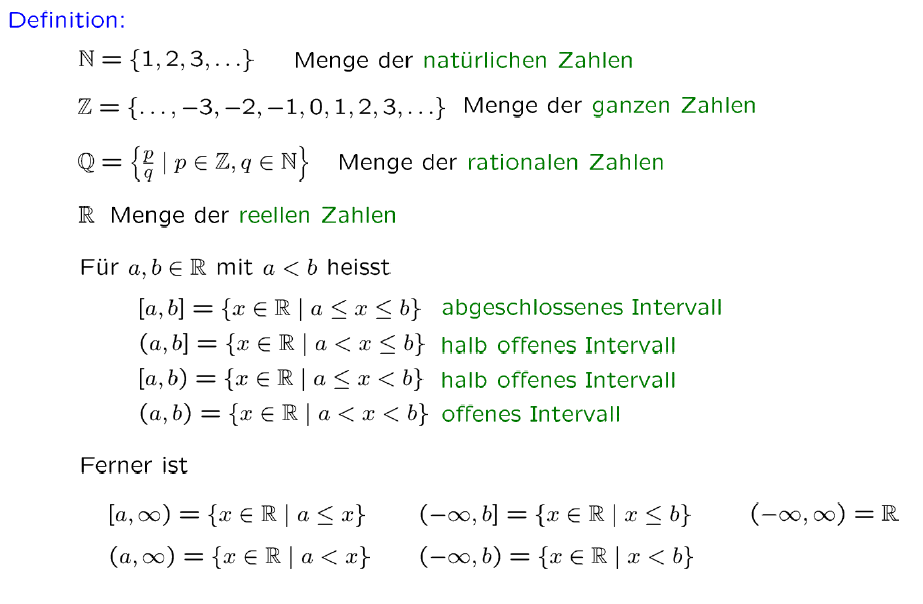
## Prüfungen

TODO

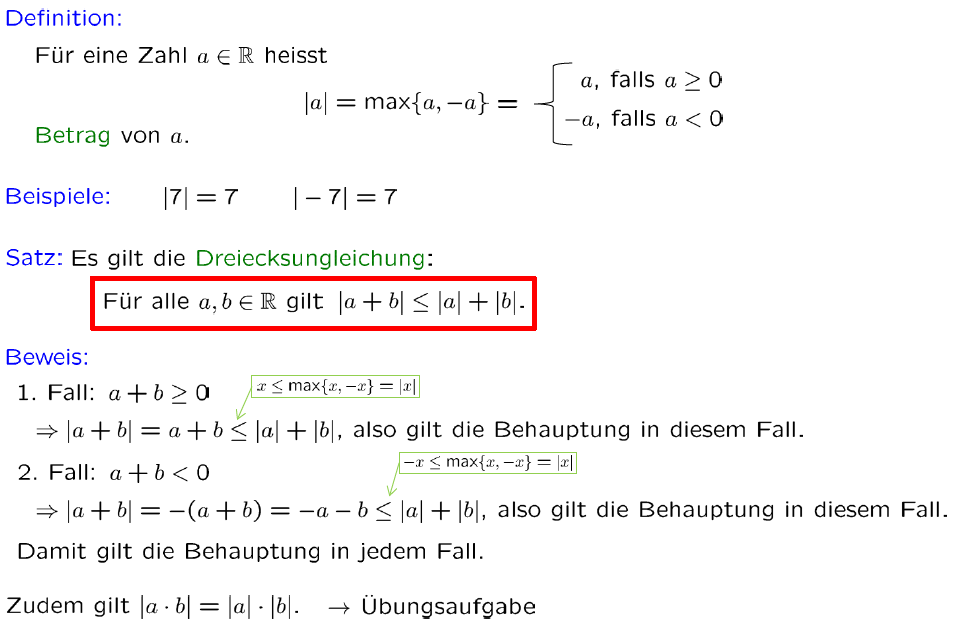
# Woche 1 & 2

## Repetition

### Mengen

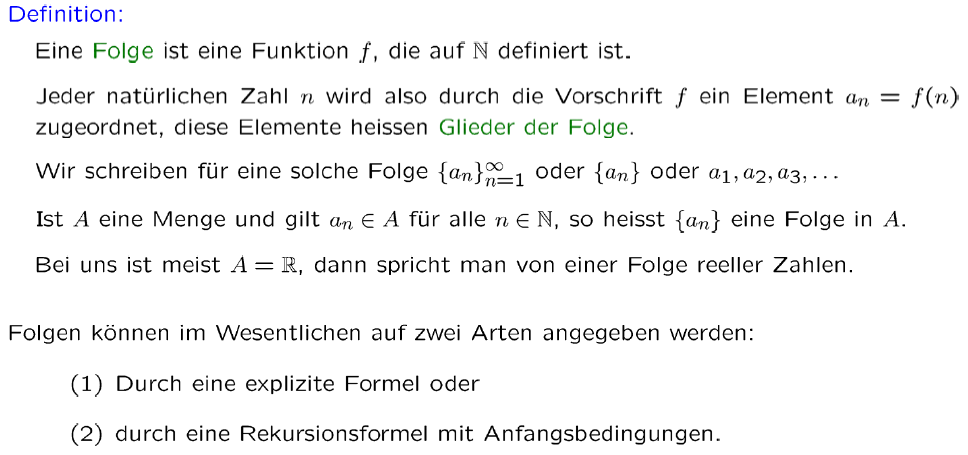


### Betrag

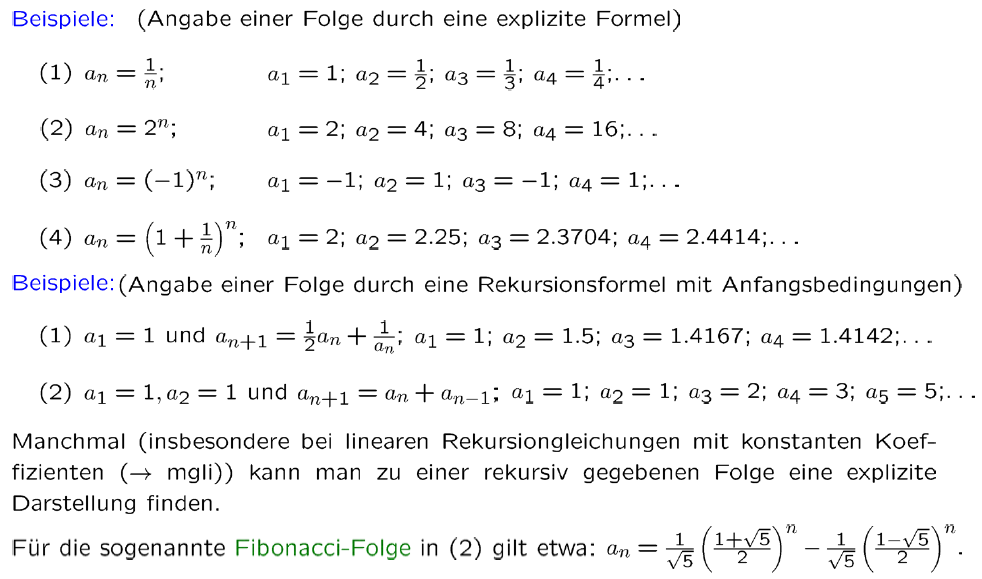


## Folgen

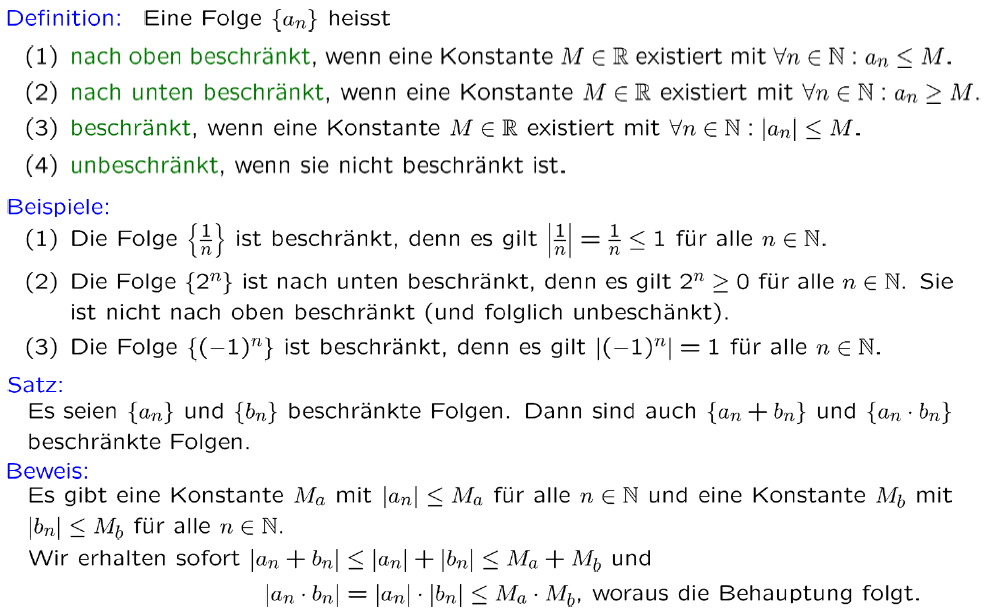
### Definition



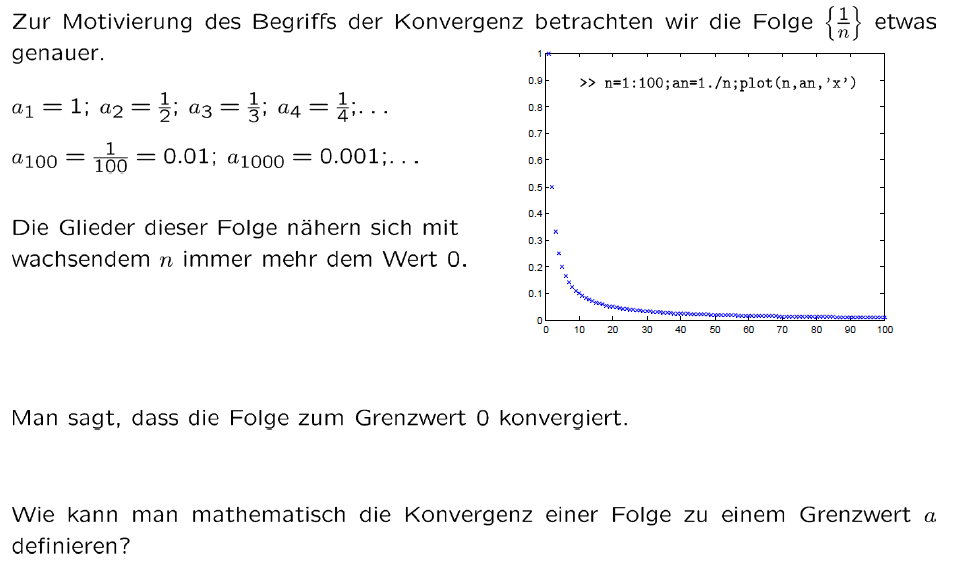
### Beispiele

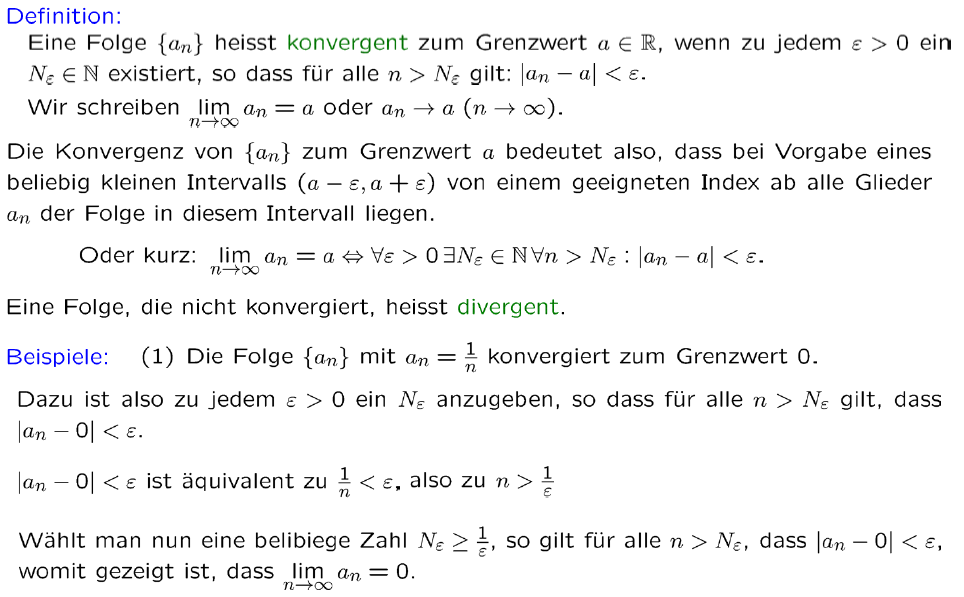


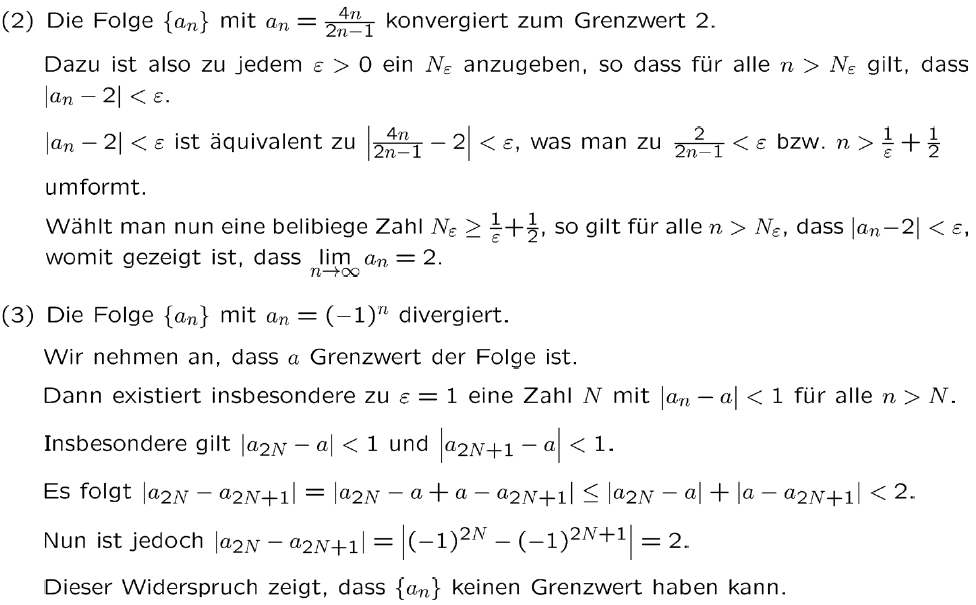
### Beschränktheit

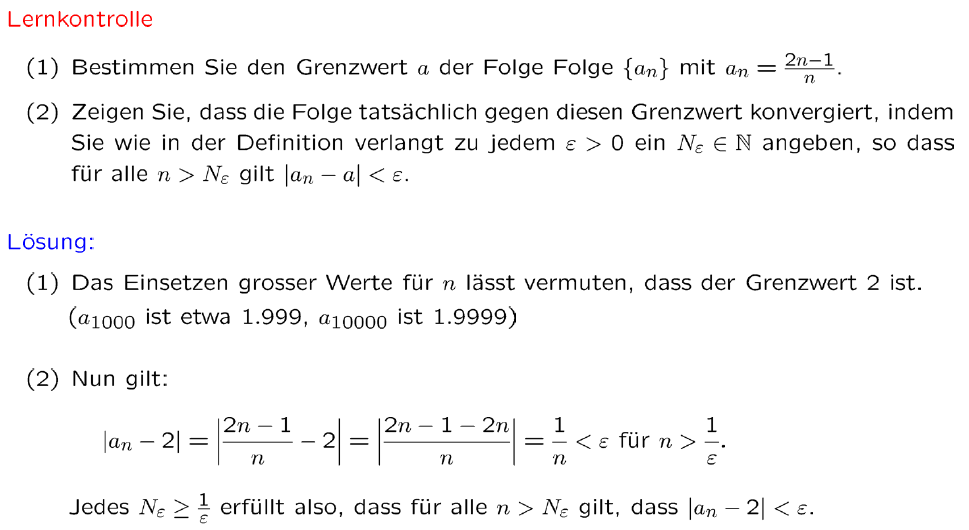


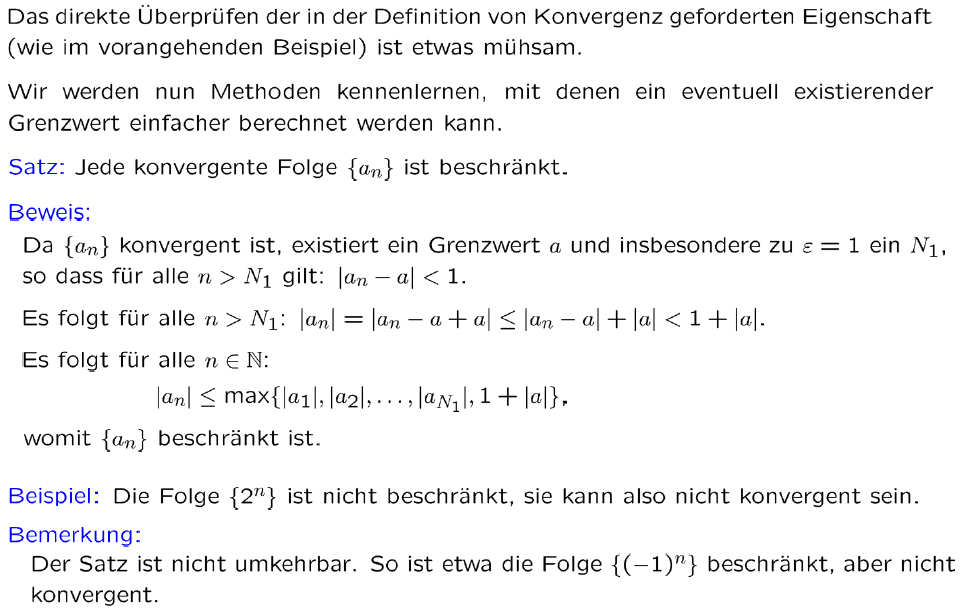
### Konvergenz

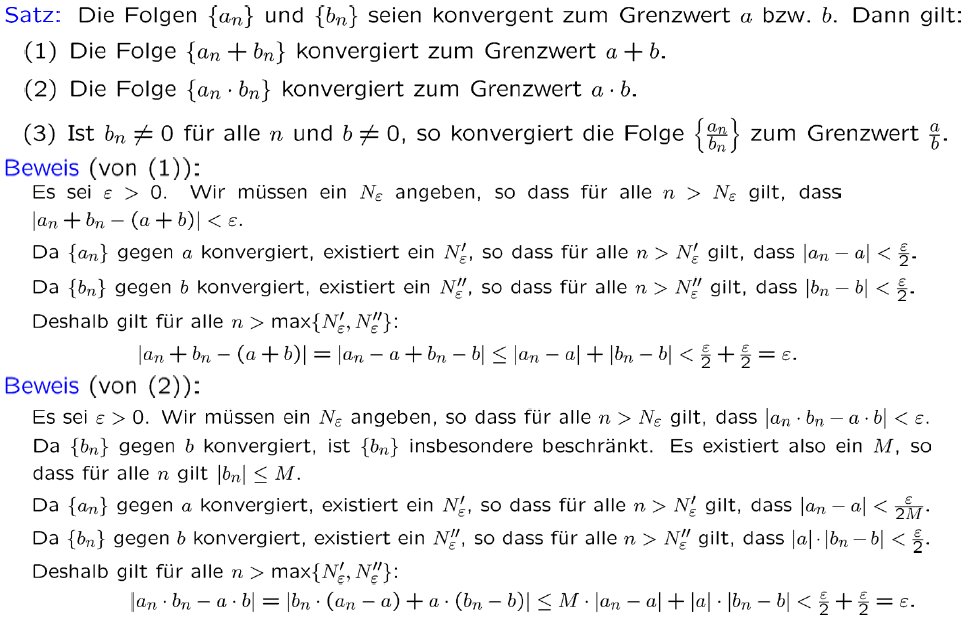


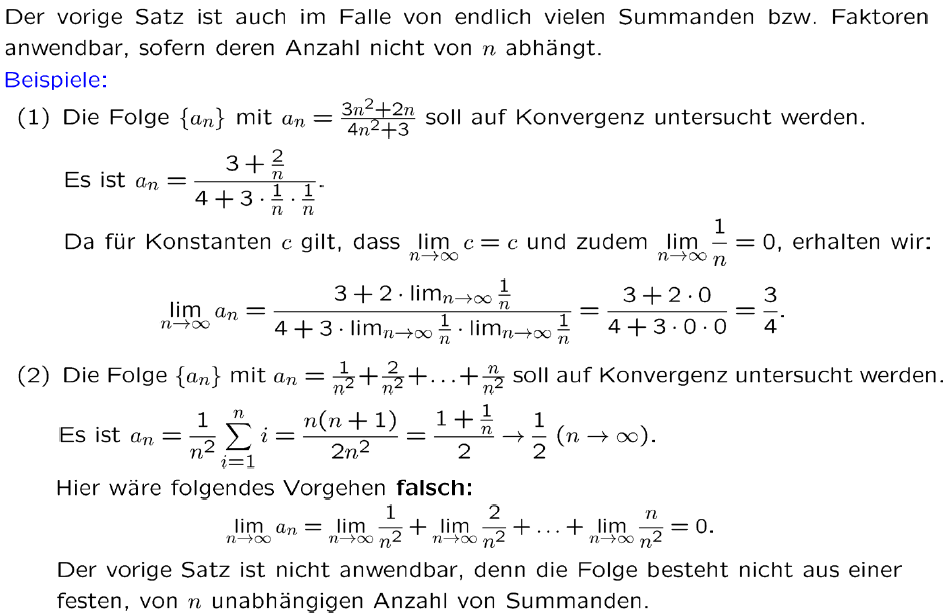


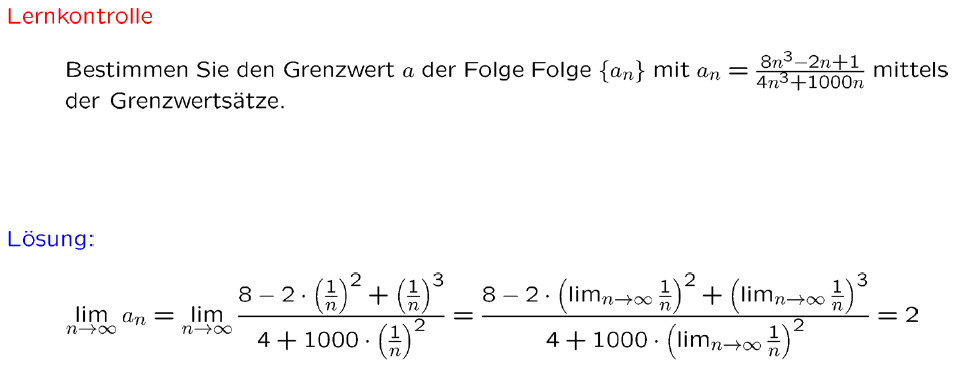








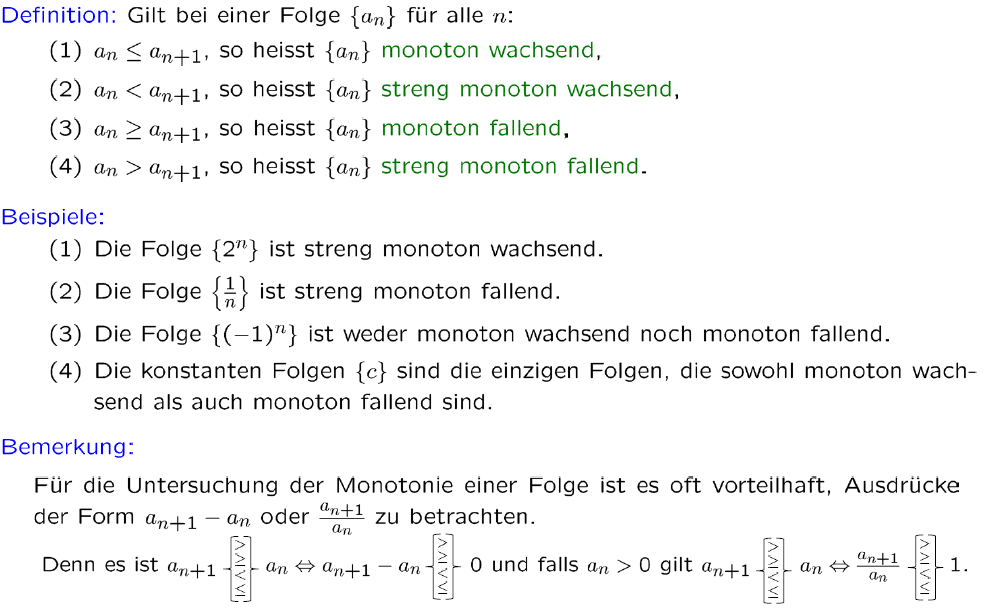


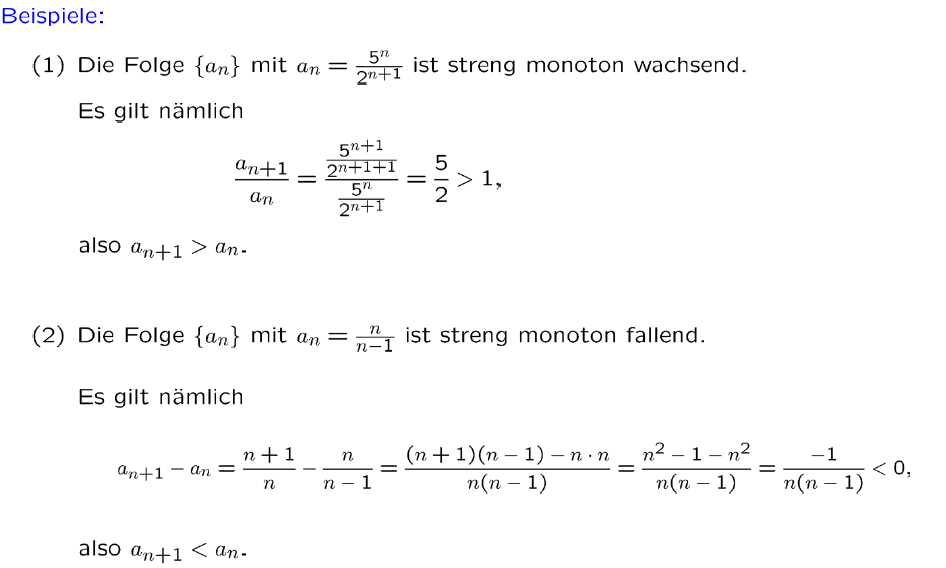


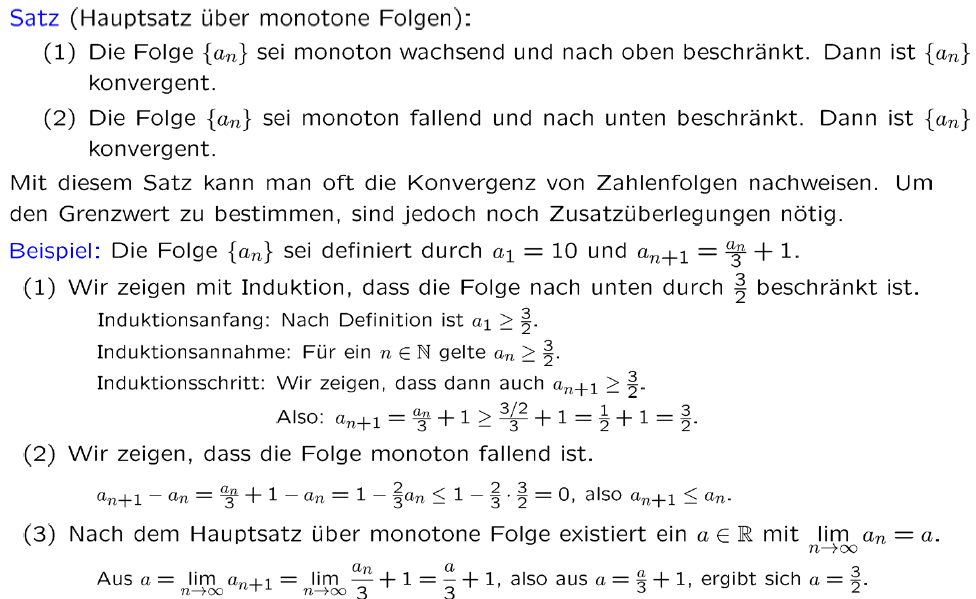
### Anwendung in Matlab

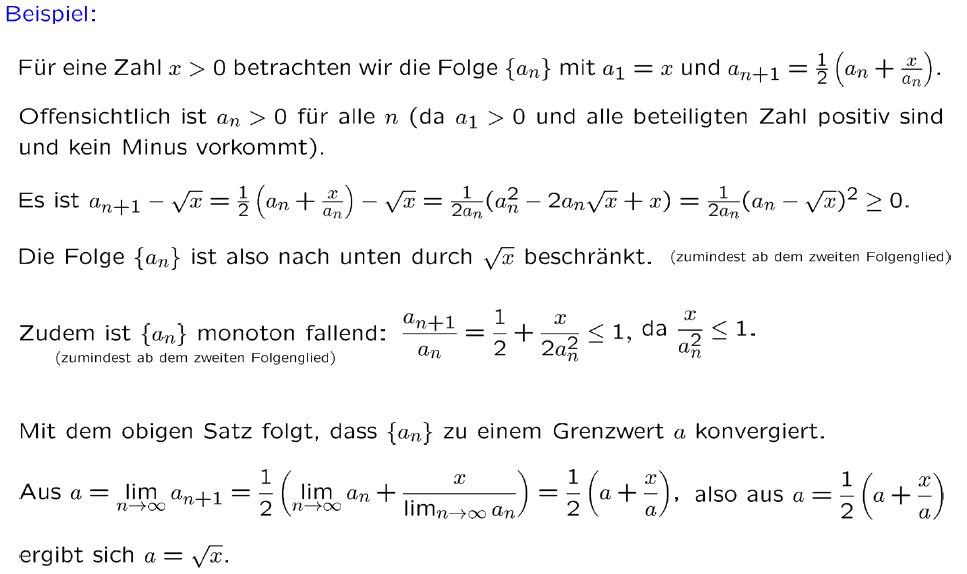


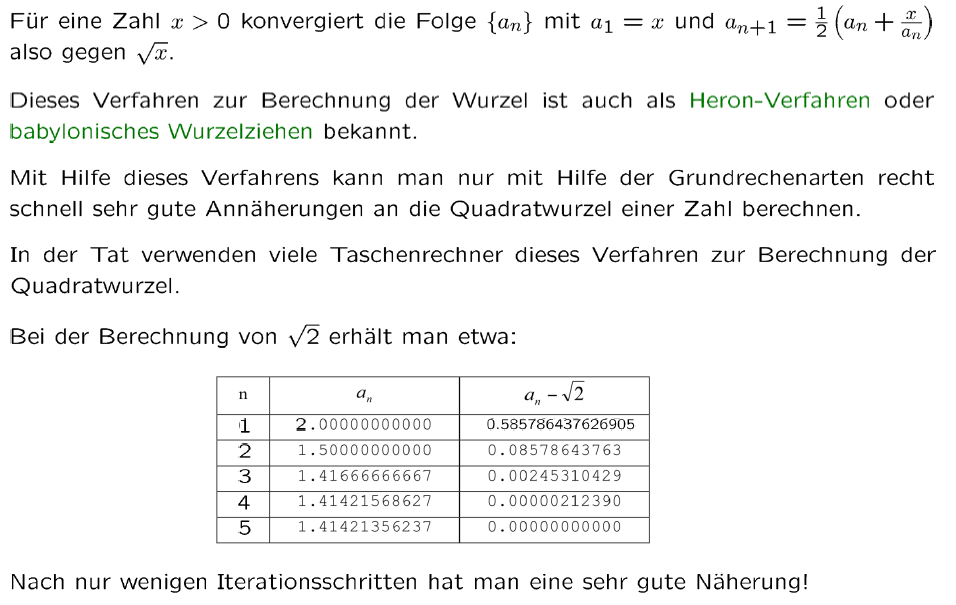
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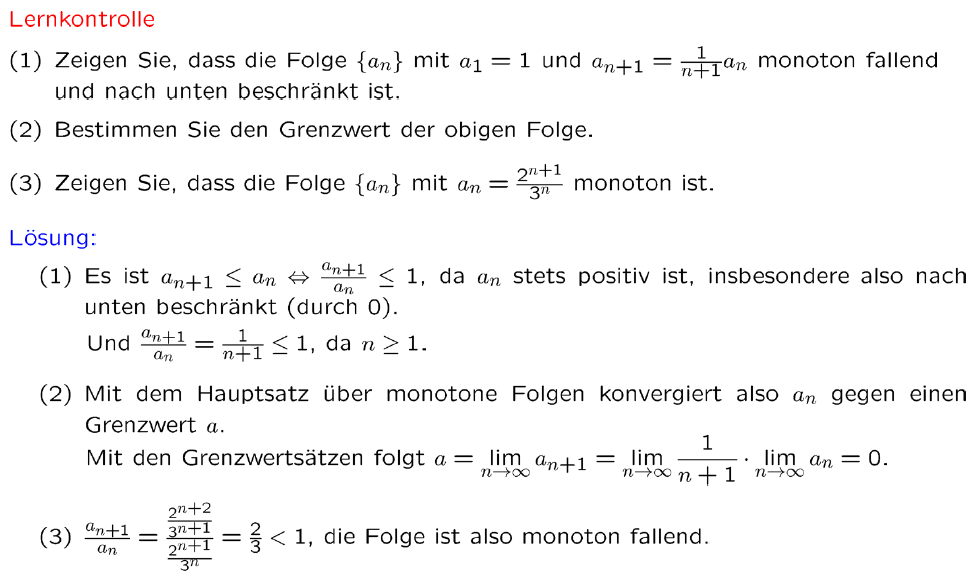




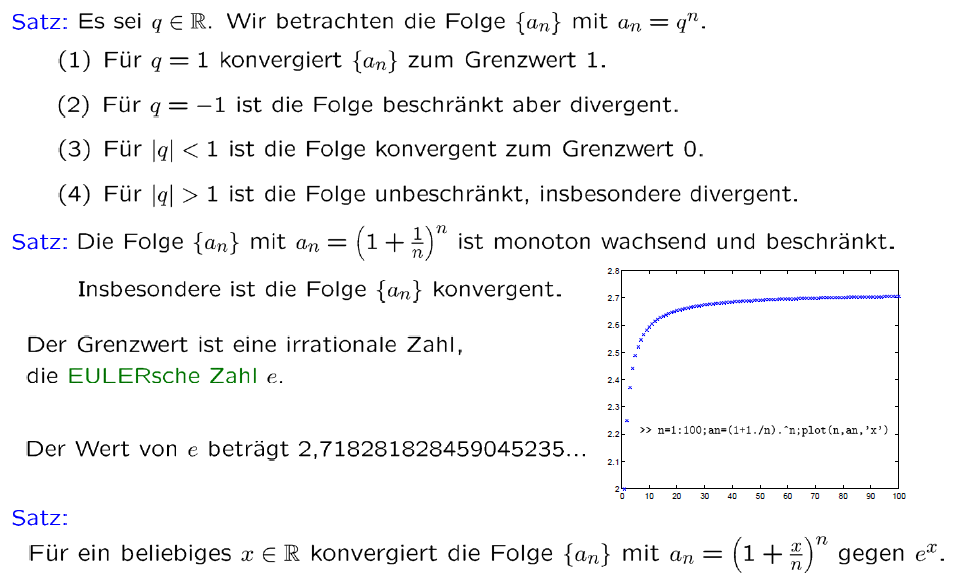




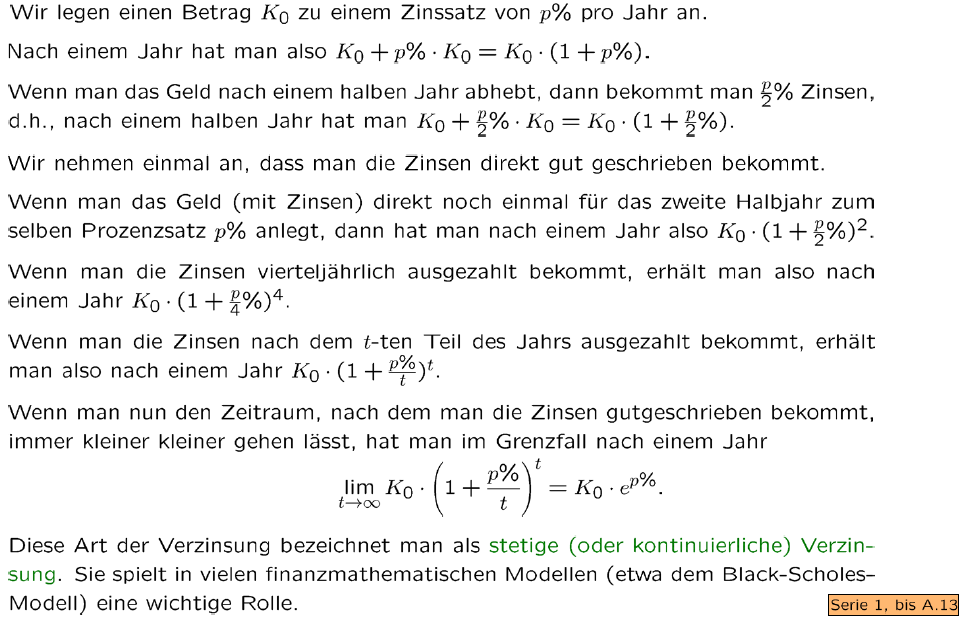




### Spezielle Beispiele

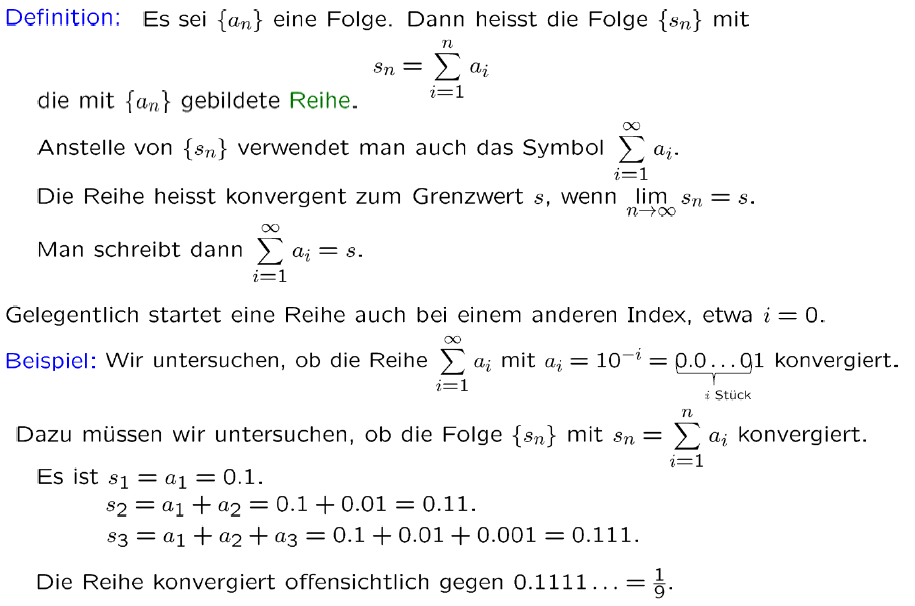


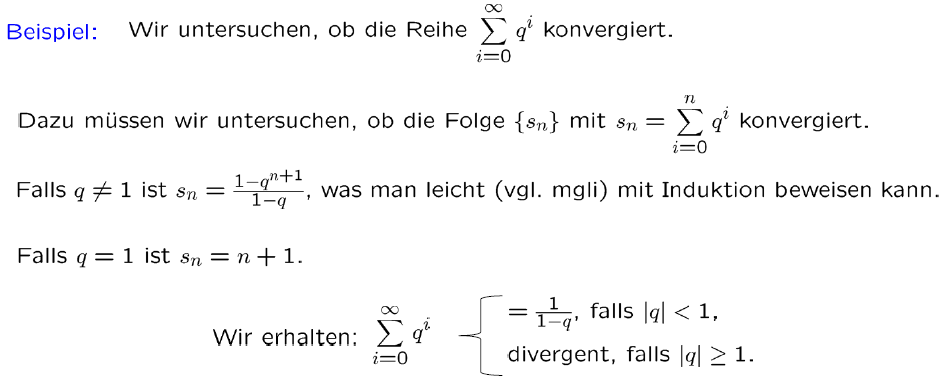
### Stetige Verzinsung



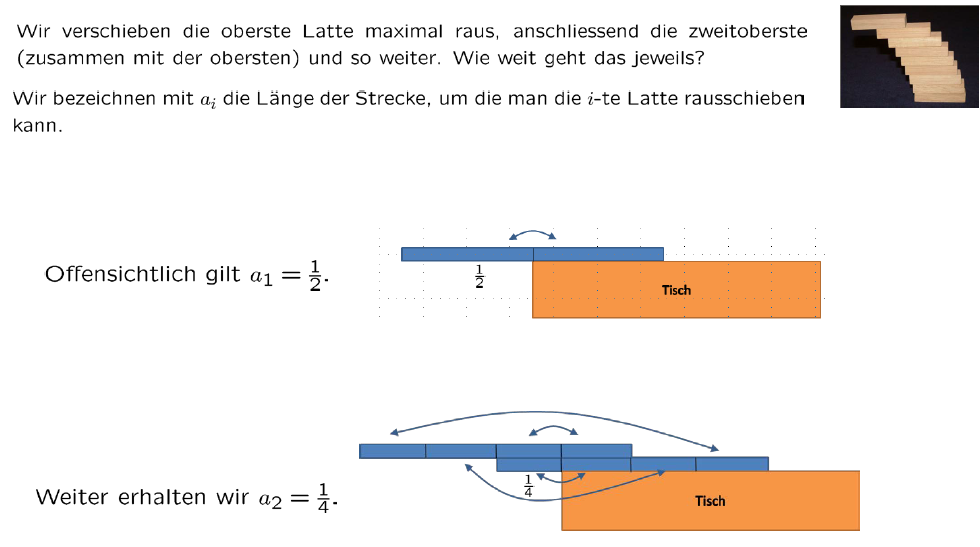
## Reihen

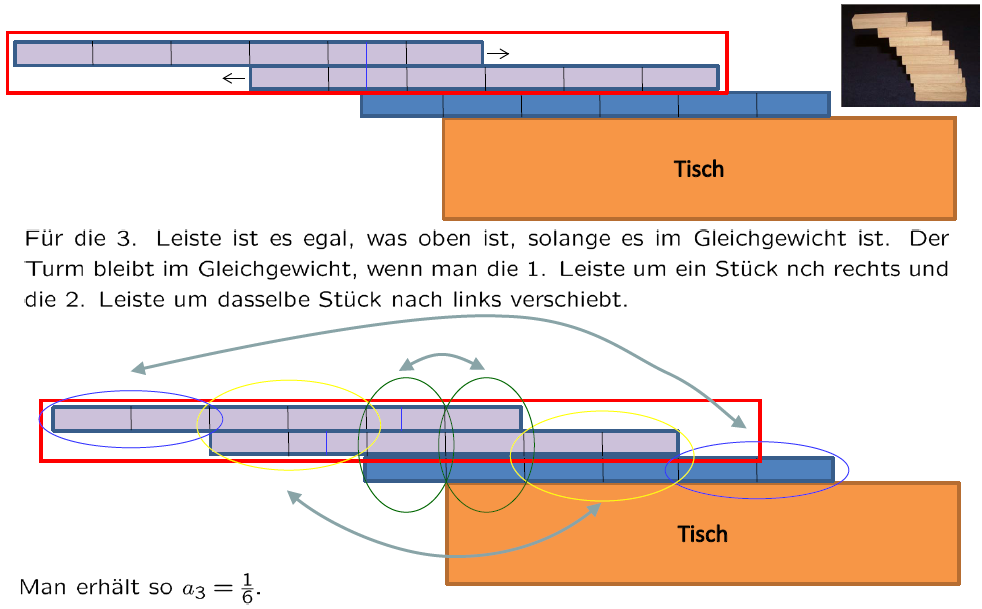
### Definition

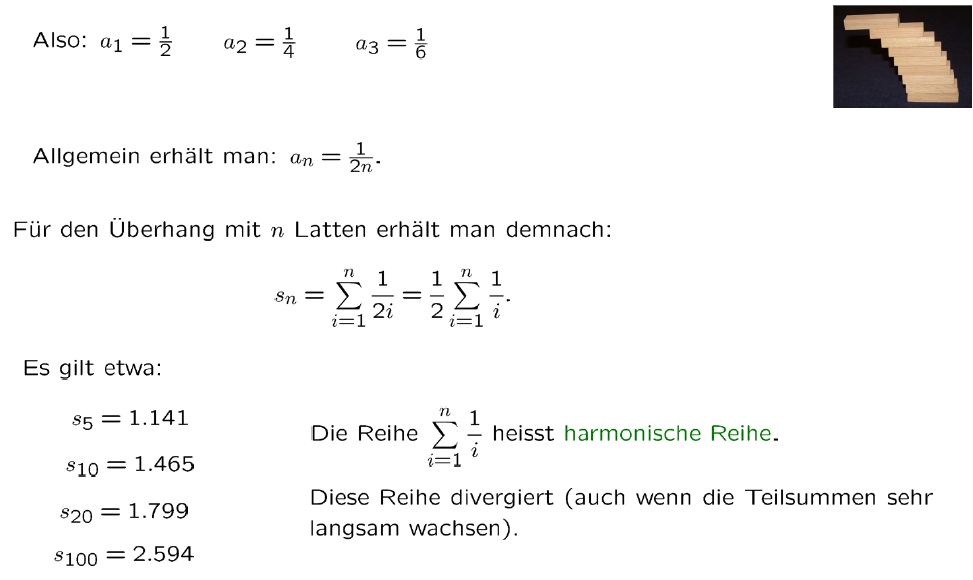




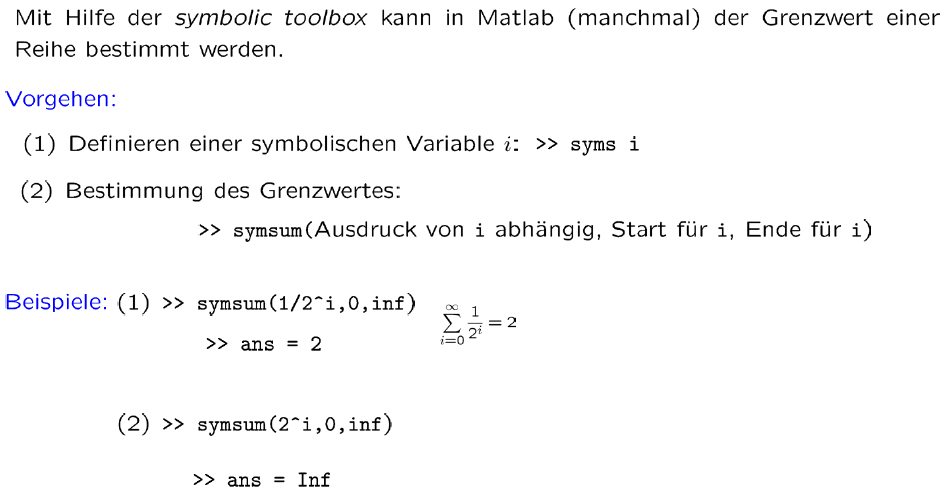








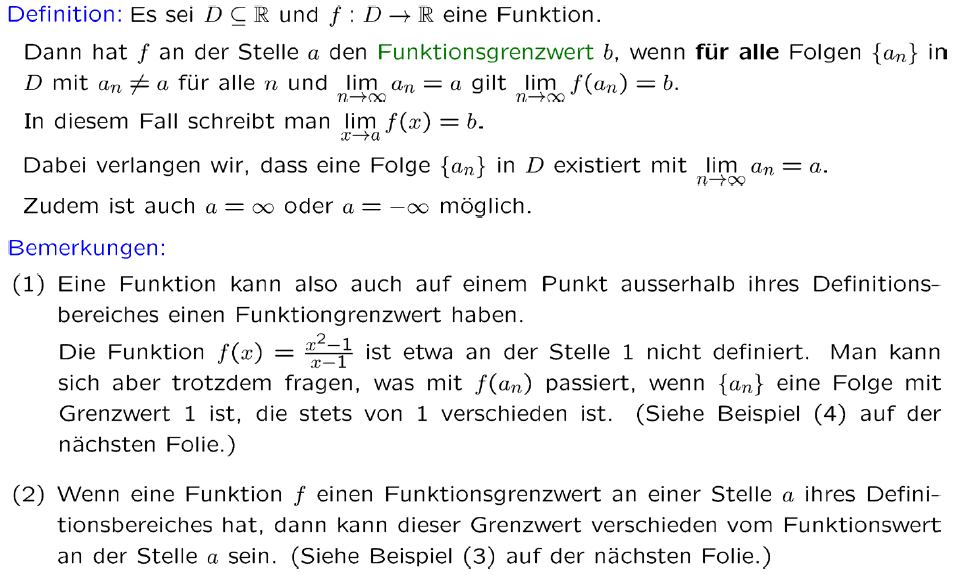
### Anwendung in Matlab



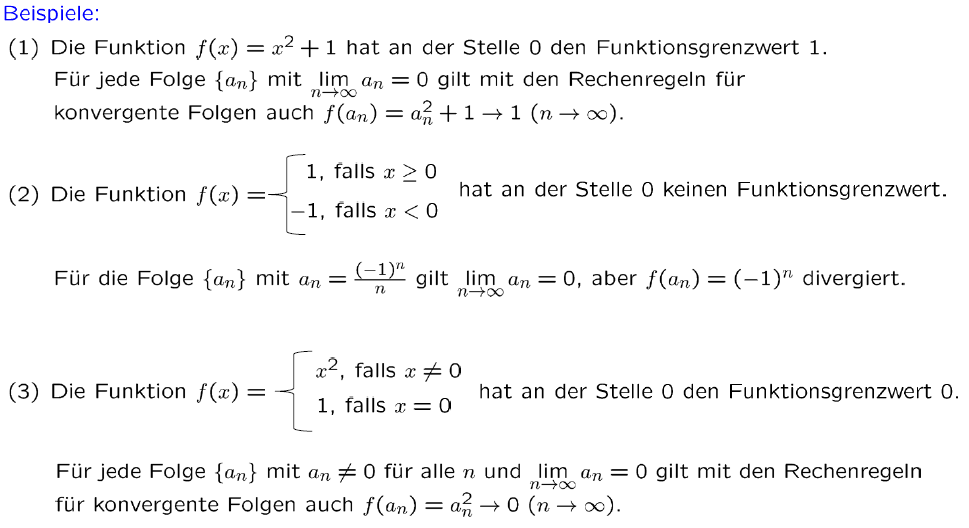
# Woche 3

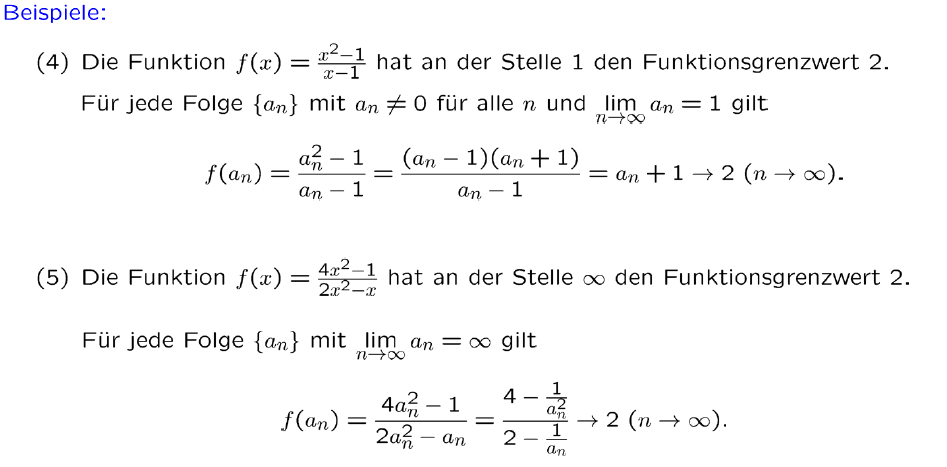
## Stetigkeit

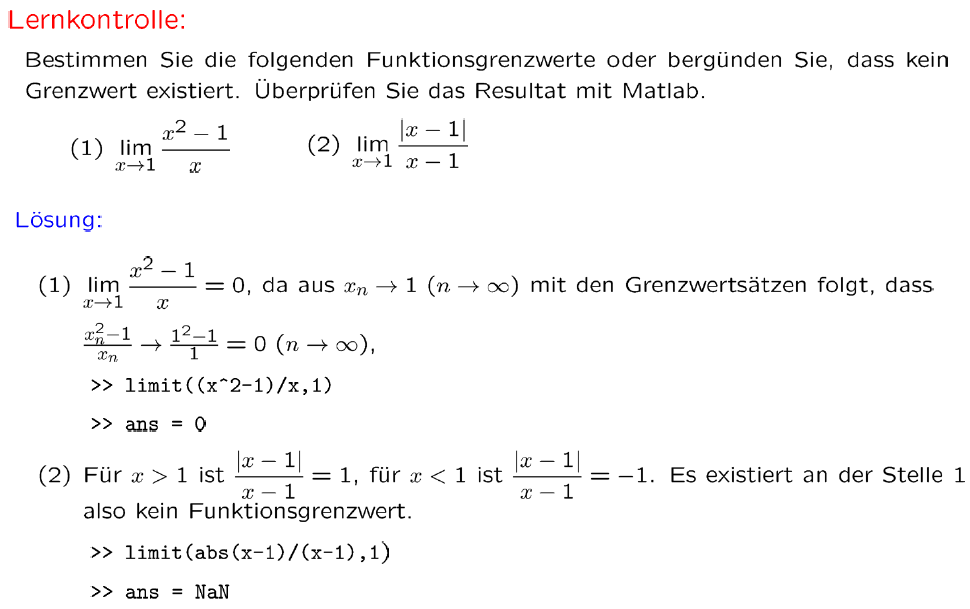
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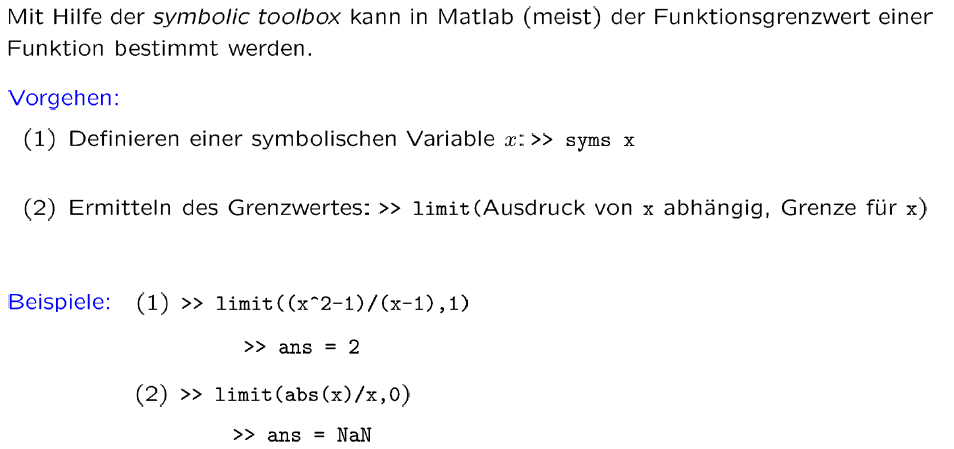
### Beispiele



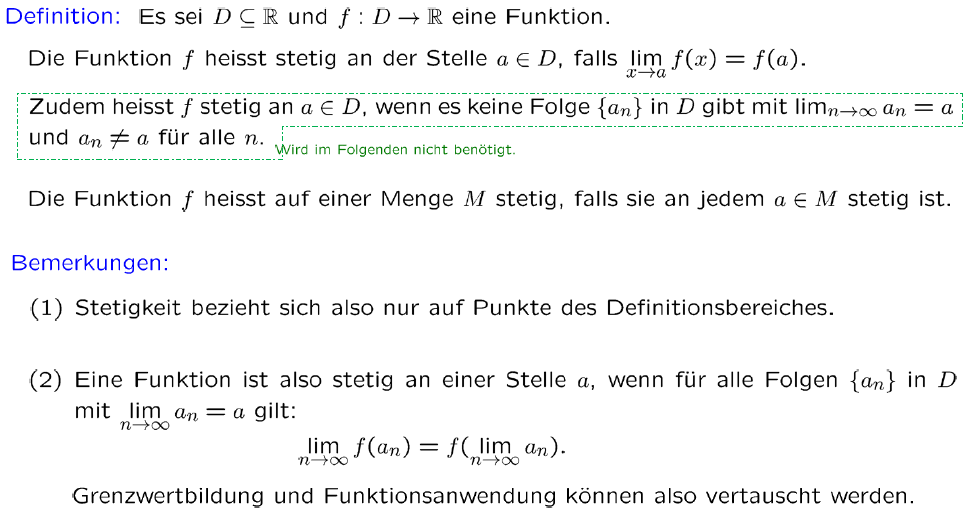




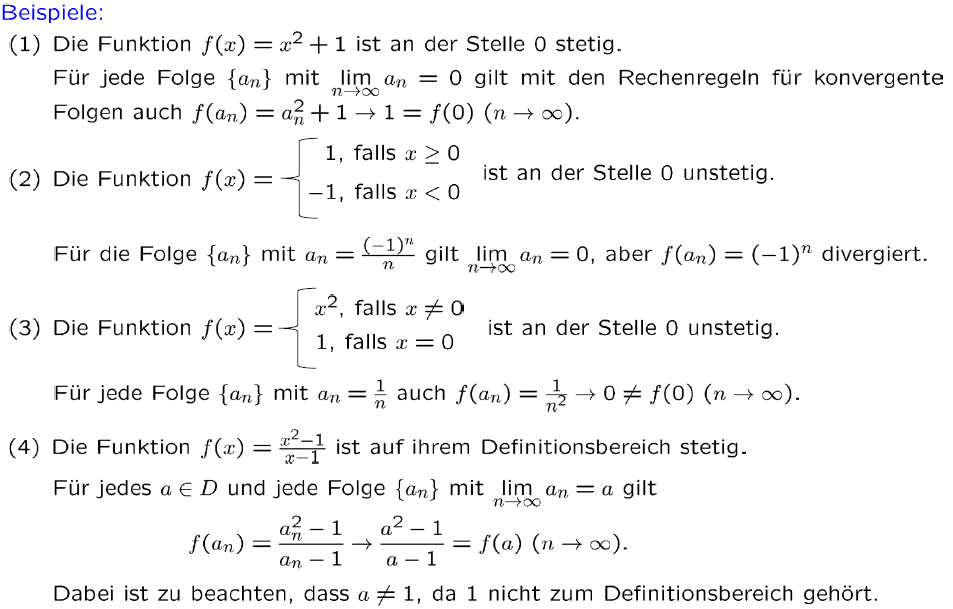
### Anwendung in Matlab

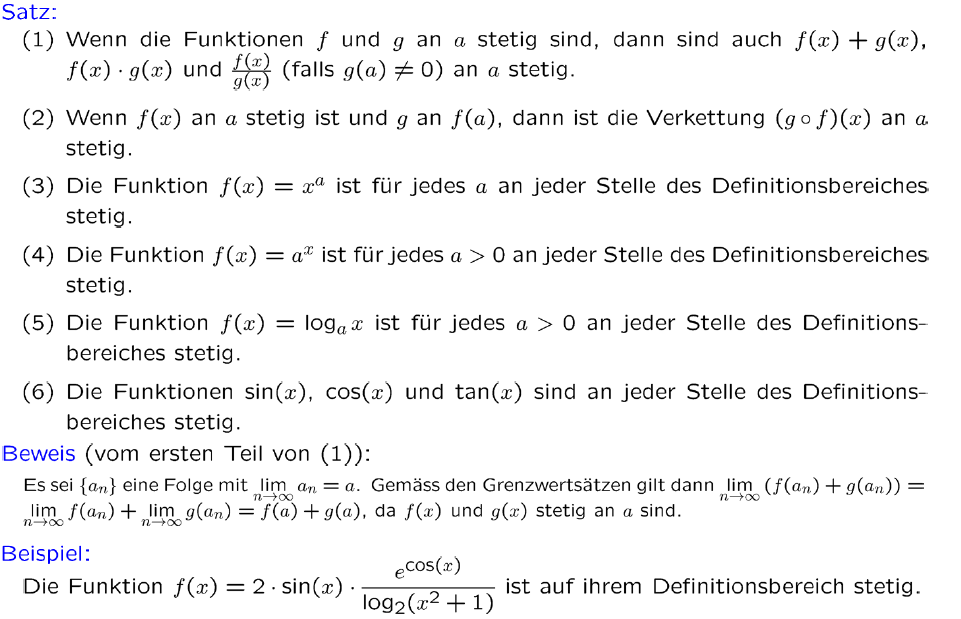


### Stetigkeit

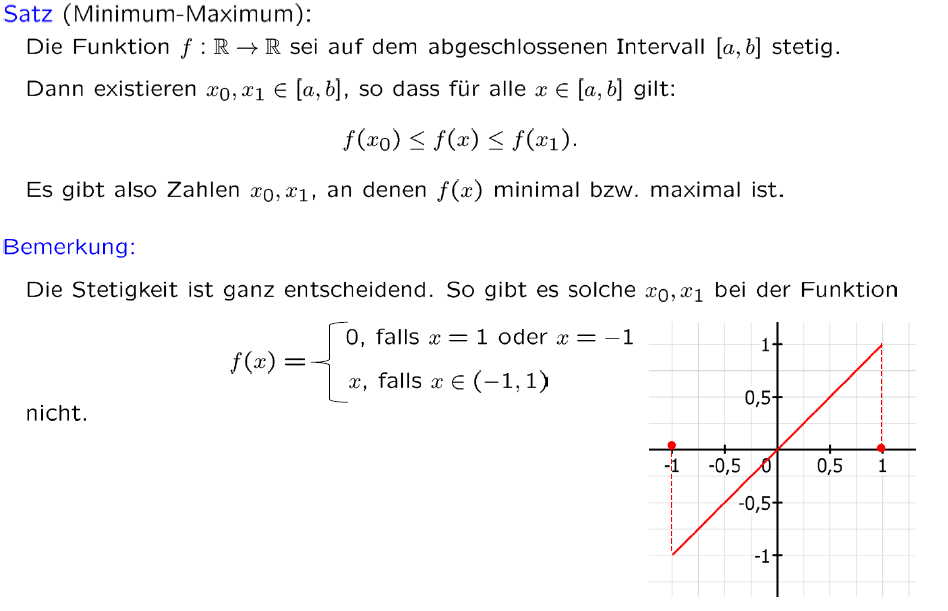


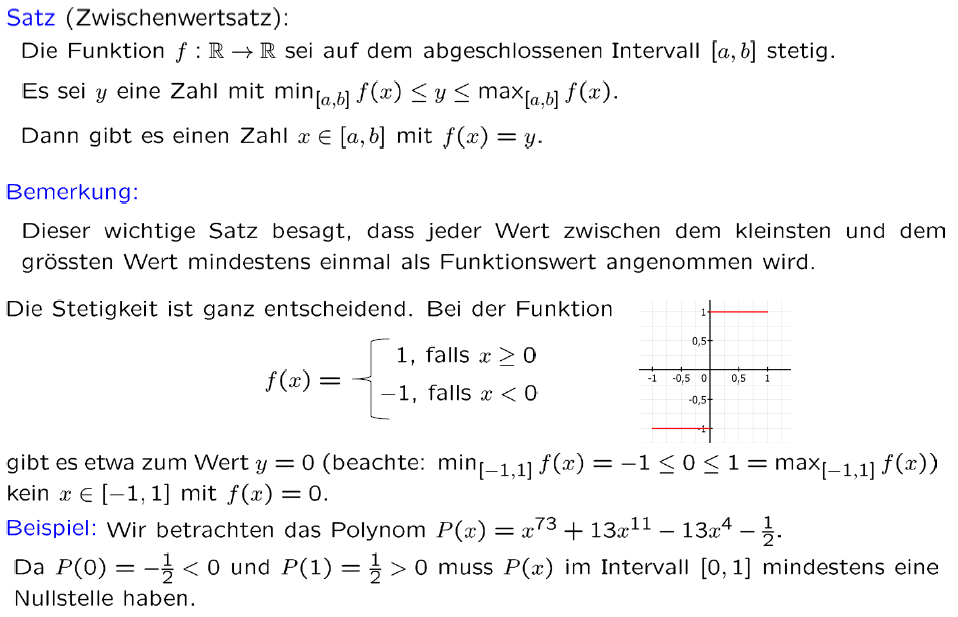
### Beispiele





### Eigenschaft stetiger Funktionen

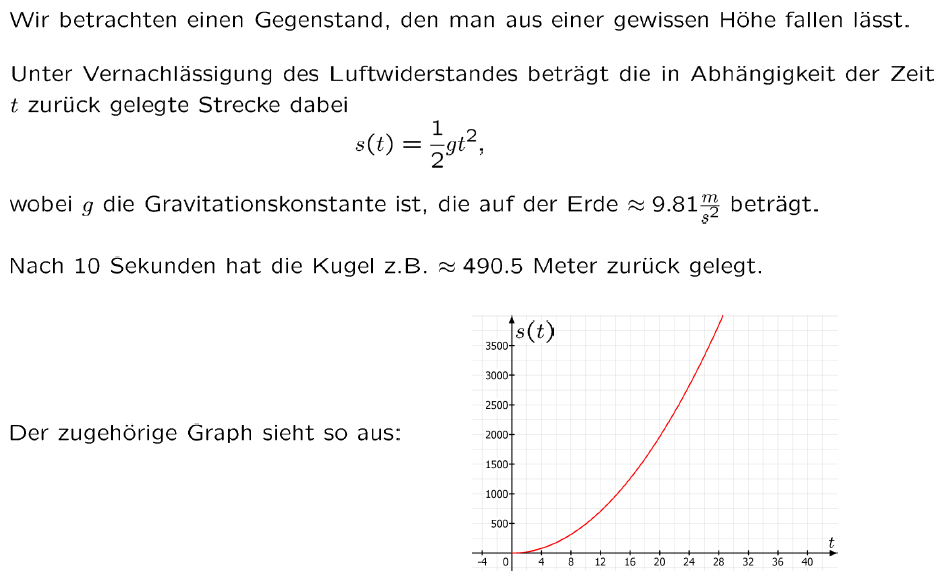


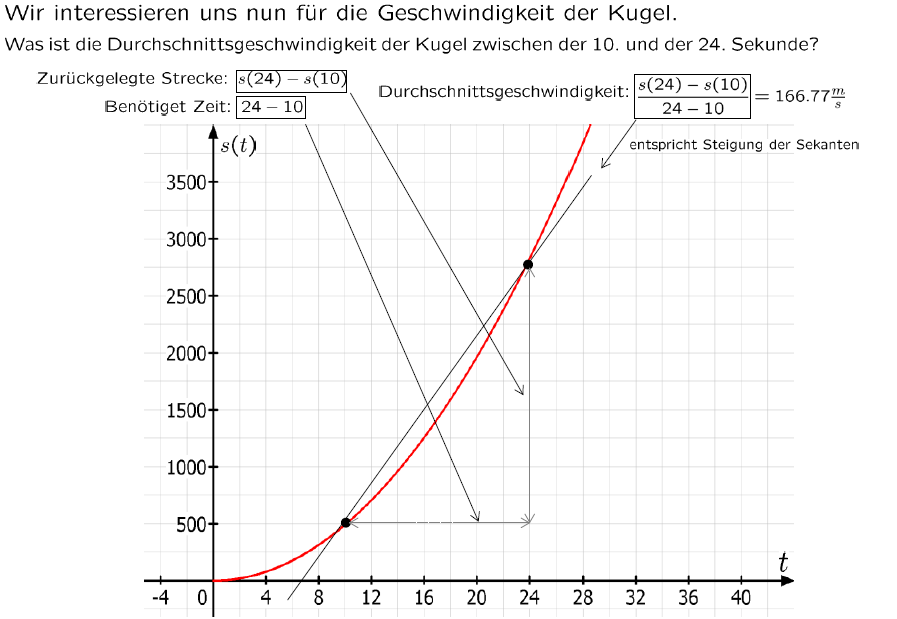


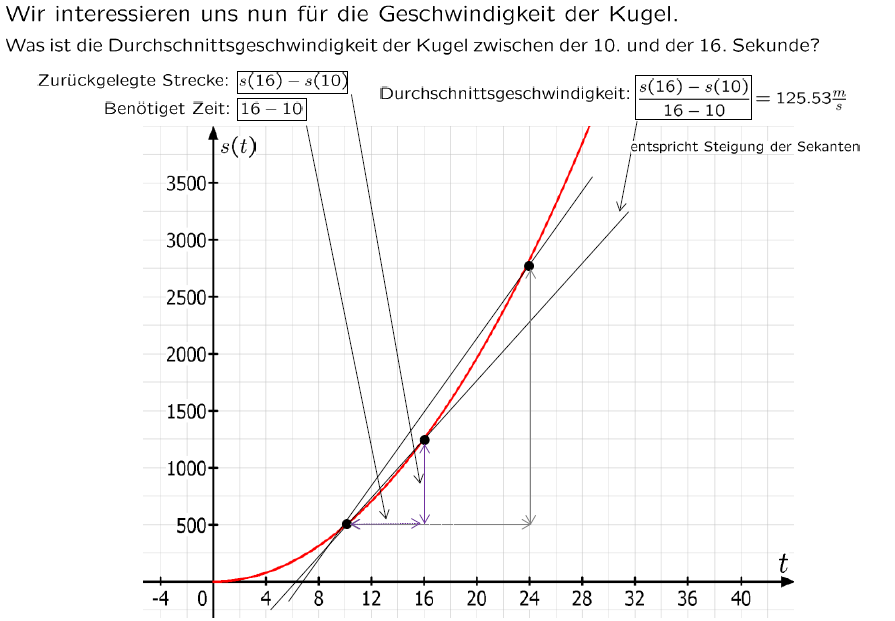
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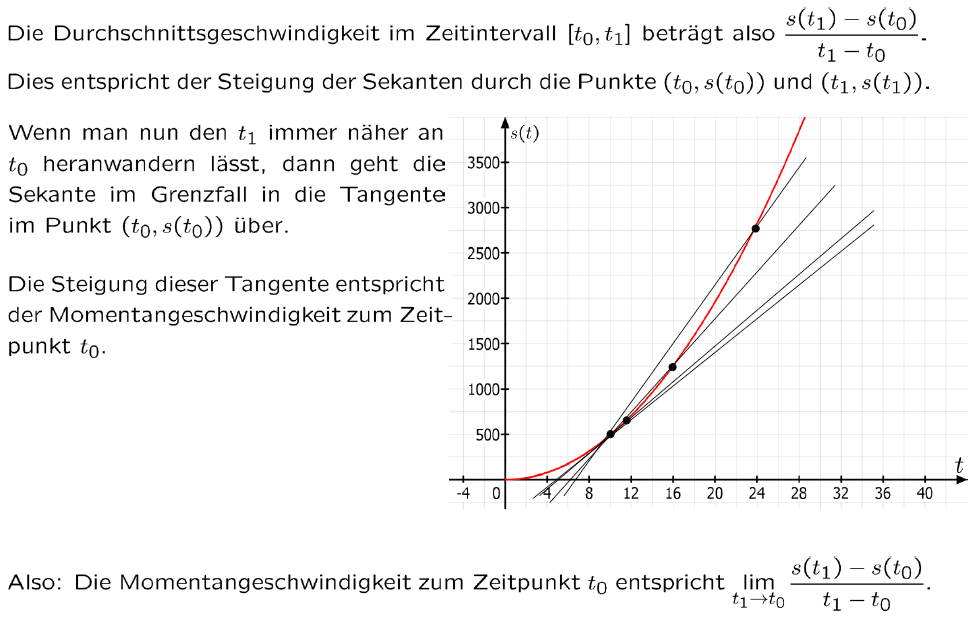
## Differentialrechnungen

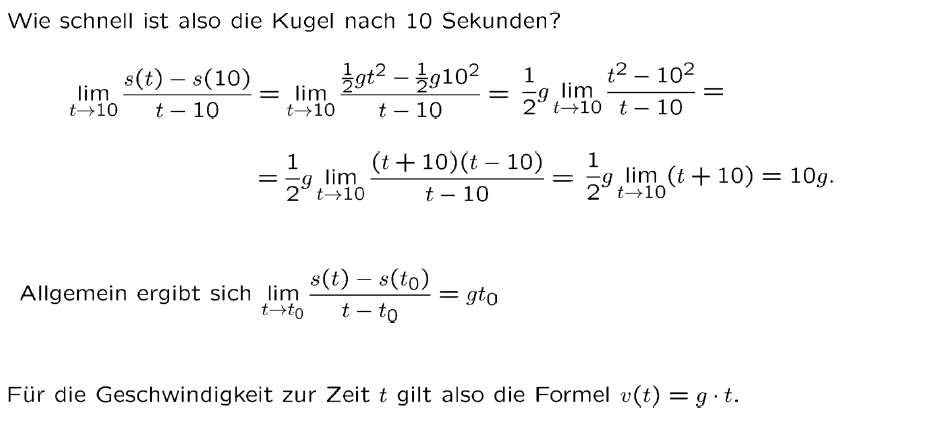
### Motivation freier Fall

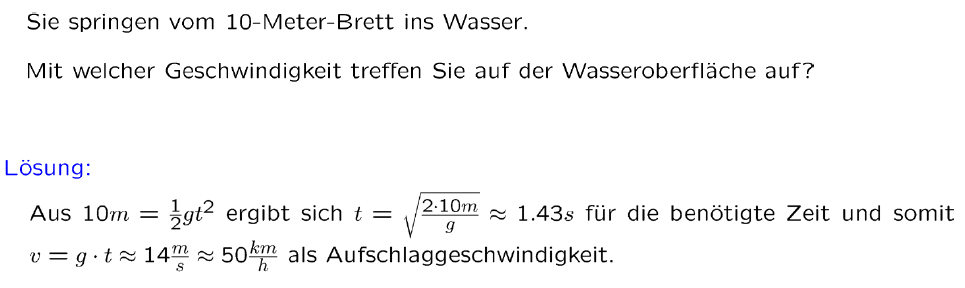




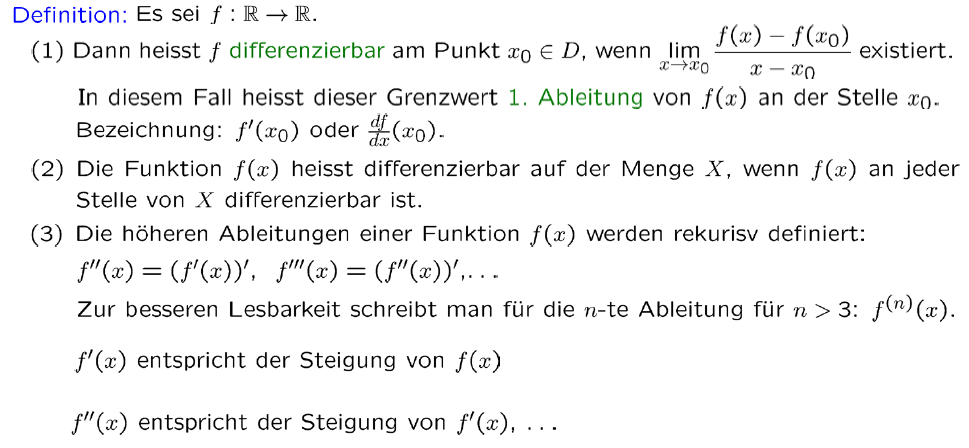




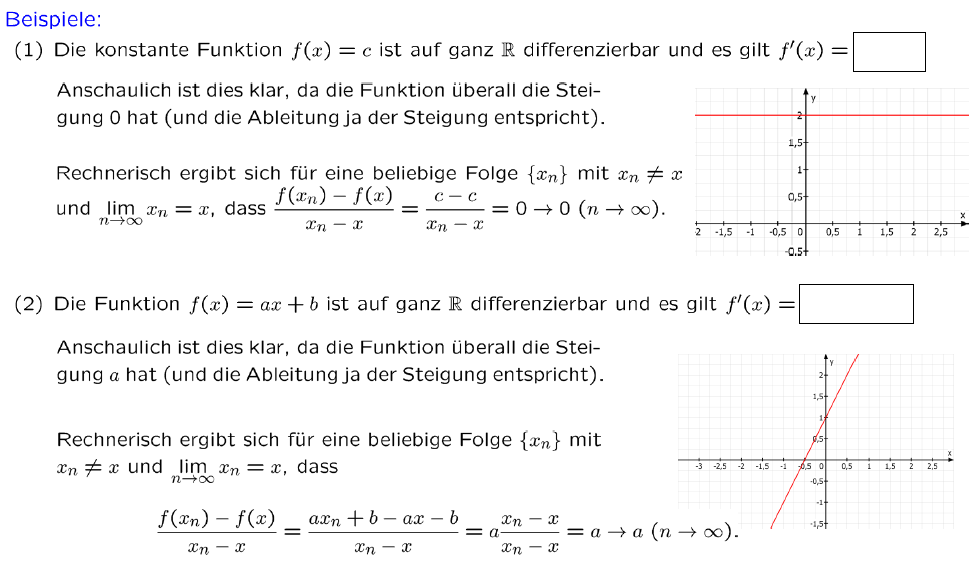


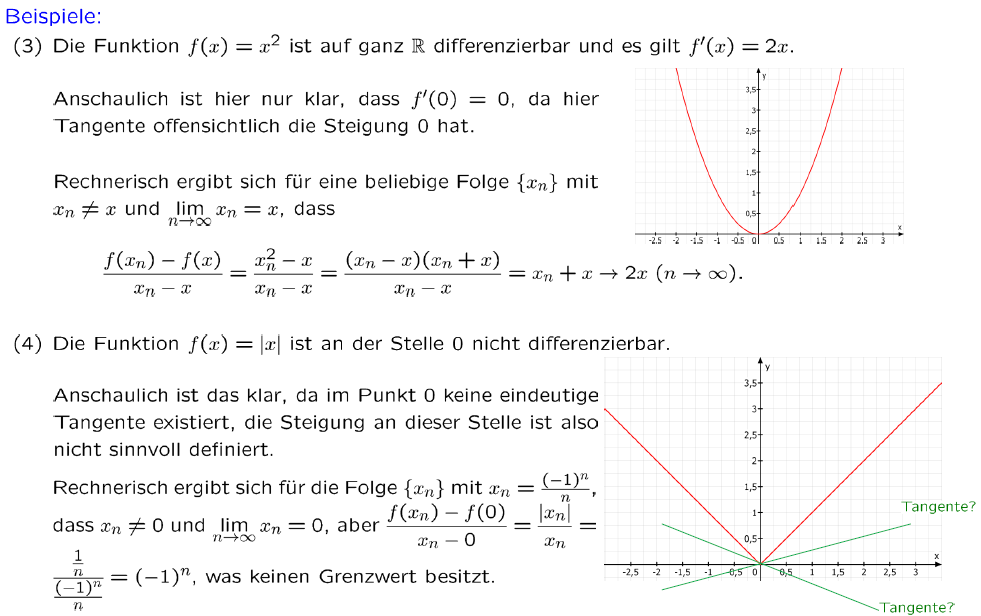


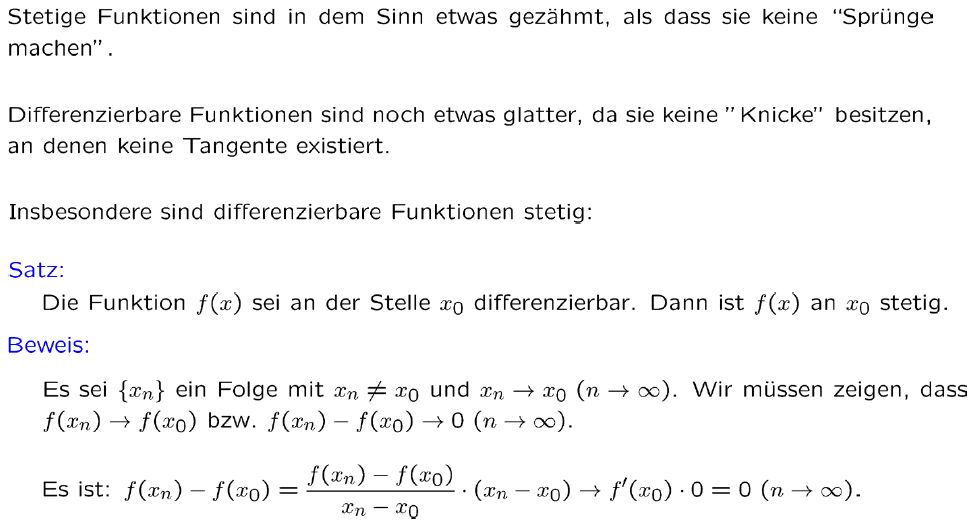
### Differenzierbarkeit



### Beispiele







# Woche 5