



*Precalculus, September 2016, HAW Hamburg
presented by Dr. Joerg Gayler*

“Precalculus” 2016

Place: Hamburg, Berliner Tor 7, Room 460

Duration: The course takes place from 5th to 9th September (5 days):

Time: 9:00 to 15:00, including breaks.

On Monday, 5. 9., we start at 10 o'clock.

Material for this English course “Precalculus”:

see “Precalculus” at the web page <http://math-grain.de/>

The given material corresponds however to a course of two weeks

A list of covered subjects is given below.

The time schedule given below may still change.

Introduced Topics

- Number sets
- Powers
- Fractions
- Linear equations and functions
- Quadratic equations and functions
- Root functions, radical equations
- Logarithms
- Trigonometry
- Vector calculus
- Functions and their properties
 - Monotonicity, symmetries, implicit functions, inverse functions
 - exponential and logarithmic functions, trigonometric functions
- Complex Numbers or Derivatives ?

Monday, 5th September :

- Welcome address, generalities
- number sets
- powers
- fractions
- powers and roots
- linear equations and functions
- all interspersed with exercises

Tuesday, 6th September :

- repetitions, exercises
- more on linear equations and functions
- quadratic equations and functions
- the root function
- radical equations

Schedule

- functions in general
- exponential function
- all interspersed with exercises

Wednesday, 7th September :

- repetitions
- more on functions in general
- logarithms
- trigonometry
- vector calculus

Thursday, 8th September :

- more on vector calculus
- Complex numbers or Derivatives ?

Friday, 9th September :

- more on Complex numbers or Derivatives?