

# Introduction

The first part of the course is devoted to the study of the basic concepts of the theory of functions of a real variable. This includes the study of the properties of the real numbers, the definition of a function, the limits of a function, and the continuity of a function.

The second part of the course is devoted to the study of the properties of the functions of a real variable. This includes the study of the monotonicity of a function, the boundedness of a function, and the extrema of a function.

The third part of the course is devoted to the study of the properties of the functions of a real variable. This includes the study of the differentiability of a function, the Taylor's theorem, and the applications of the differential calculus.

The fourth part of the course is devoted to the study of the properties of the functions of a real variable. This includes the study of the integration of a function, the Riemann's integral, and the applications of the integral calculus.

The fifth part of the course is devoted to the study of the properties of the functions of a real variable. This includes the study of the series of functions, the uniform convergence, and the applications of the series of functions.

The sixth part of the course is devoted to the study of the properties of the functions of a real variable. This includes the study of the functions of several variables, the partial derivatives, and the applications of the differential calculus.

The seventh part of the course is devoted to the study of the properties of the functions of a real variable. This includes the study of the functions of a complex variable, the analytic functions, and the applications of the complex analysis.

The eighth part of the course is devoted to the study of the properties of the functions of a real variable. This includes the study of the functions of a real variable, the functions of a complex variable, and the applications of the complex analysis.