

Preliminaries about functions. Know:

- Formal definition of a function.
- Formal definitions of injection, surjection and bijection; important examples of bijections and definitions of the important inverse functions (relevant material posted on September 26 and September 27)
- The definition of the composition of functions and have understanding of the website post on September 29 related to this definition

Limits, continuity Know:

- The formal definition of limit at $+\infty$ posted on October 2 and how to apply this definition in simple examples (posts of October 2 and October 3)
- The ϵ - δ definition of limit at a point a and how to apply this definition in simple examples (post of October 4)
- Proofs posted on the website on October 5. (This is closely related to the Lipschitz condition for the existence of limit posted on October 11)
- ϵ - δ definition of continuity of a function at a point and how to apply it in simple examples (posts on October 7, October 10 and October 11)
- The Intermediate Value Theorem and the Extreme Values Theorem and how to apply them in simple situations

Derivatives. Know:

- The formal definition of differentiability and derivative of a function and how to apply these definitions in simple examples (post of October 14)
- the concept of the tangent line to a graph and its connection to the definition of derivative and how to calculate tangent lines to simple graphs