

# Cauchy Mastery Badge

You must bring physical copies of this sheet as well as a the signature sheet to your meeting when you attempt the extra credit.

- To demonstrate **Knowledgable Level**, the student must show that she/he can recite the basic rules associated with the area of concern from memory. Possible rules that will be asked include the following:
  - Existence & Finding Inverse Functions
  - Definition & Graphs of Inverse Trigonometric Functions
  - Graphical, Numerical, and Analytical Definitions of a Limit
  - Limit Laws & Squeeze Theorem
  - Definition of Asymptotes and Continuity
  - Intermediate Value Theorem
- To demonstrate **Proficiency Level**, the student must complete two homework problems chosen by the professor, showing all work, without any aides. Possible problems will come from the homework assigned for the below sections.
  - 1.3–1.4
  - 2.2–2.3
  - 2.4–2.6
- To demonstrate **Masterly Level**, the student must complete one example and one explanation chosen by the professor that previously had not been assigned without any aides. The example and explanation will come from the sections listed in the Knowledgable Section above or from the Chapter Review Section of the text associated with the above sections.
  - Example 1
  - Explanation

The first date that students are allowed to attempt to pass levels for the Cauchy Badge is Thursday, 30 January 2020. You are allowed to pass multiple levels on the same date but the Mastery level may only be attempted after completely passing the prior two. If a question or explanation is not completed correctly, the student must wait until at least the next day before attempting to pass that level again. If you pass parts of a level during a meeting, you may have the instructor initial those sections as completed. You must bring this sheet with you and your 'Calculus Mastery Badge' signature sheet with you to attempt a level.