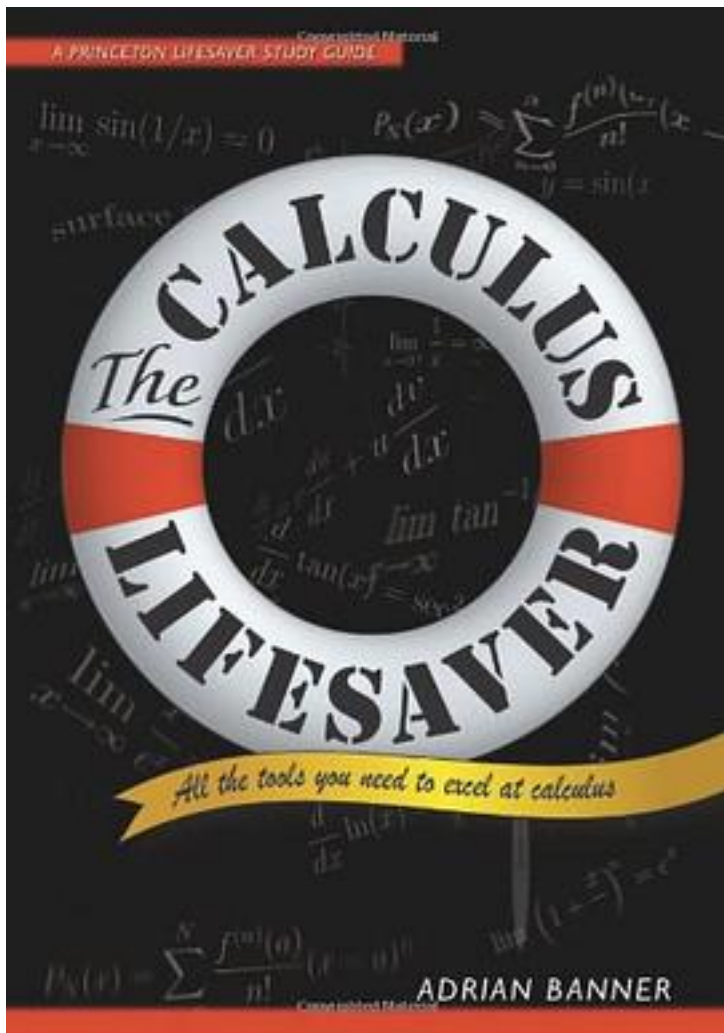


The Calculus Lifesaver



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For many students, calculus can be the most mystifying and frustrating course they will

ever take. The Calculus Lifesaver provides students with the essential tools they need not only to learn calculus, but to excel at it.

All of the material in this user-friendly study guide has been proven to get results. The book arose from Adrian Banner's popular calculus review course at Princeton University, which he developed especially for students who are motivated to earn A's but get only average grades on exams. The complete course will be available for free on the Web in a series of videotaped lectures. This study guide works as a supplement to any single-variable calculus course or textbook. Coupled with a selection of exercises, the book can also be used as a textbook in its own right. The style is informal, non-intimidating, and even entertaining, without sacrificing comprehensiveness. The author elaborates standard course material with scores of detailed examples that treat the reader to an "inner monologue"--the train of thought students should be following in order to solve the problem--providing the necessary reasoning as well as the solution. The book's emphasis is on building problem-solving skills. Examples range from easy to difficult and illustrate the in-depth presentation of theory.

The Calculus Lifesaver combines ease of use and readability with the depth of content and mathematical rigor of the best calculus textbooks. It is an indispensable volume for any student seeking to master calculus.

Serves as a companion to any single-variable calculus textbook

Informal, entertaining, and not intimidating

Informative videos that follow the book--a full forty-eight hours of Banner's Princeton calculus-review course--is available at Adrian Banner lectures

More than 475 examples (ranging from easy to hard) provide step-by-step reasoning

Theorems and methods justified and connections made to actual practice

Difficult topics such as improper integrals and infinite series covered in detail

Tried and tested by students taking freshman calculus

作者介绍:

Adrian Banner

澳大利亚新南威尔士大学数学学士及硕士，普林斯顿大学数学博士。2002年起任职于INTECH公司，2009年担任INTECH公司首席投资官。同时在普林斯顿大学数学系任兼职教师。

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标签

数学

Calculus

微积分

国外教材

Mathematics

计算机科学

數學

教材

评论

非常详细，也非常啰嗦，解题思路也很全，可以说是苦口婆心了。另外这本书语言很风趣，看到有些地方忍不住笑出猪叫（没有练习有些可惜，打算配合习题和3blue1brown的视频再过一遍。

The most freaking thing I met that studying in America is a really good textbook always without enough exercises....

Neat. So much fun&pain, well, fun mostly

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书评

Page 13, Para 4, Line 4: 第一个 $f(-x)$ 应是 $f(x)$ ，第二个 $f(-x)$ 应是 $-f(x)$ 。→
原版书此处也有错：Page 15, 倒数第2行: $f(-x)$ 应是 $f(x)$ 。Page 16, Para 2, Line 6:
最后那个大写字母I应该改为数字1。Page 16, Para 2, Line 8:
“上述多项式的系数”中的“系数”应改为“度数” ...

之前数学老师就推荐过这本书，因为看上去蛮厚所以一直没读……后来老师开讲，赶紧捧起来看一看。里面没什么习题之类的，作者也说他看重的是做题的思维，所以采用“内心独白”的方式写这本书。恰好我是一个比较懒的人，不喜欢看一大堆数字和公式，所以非常喜欢这本书！而...

真心感谢我遇到了这本calculus lifesaver.过去在学校里的数学课程，教材，老师课授的方式很粗暴无厘头，“无趣无聊的科学工具”（尽管很多人说数学是interesting的）每个学生对于数学，我指广义数学，mathematic，有不同的理解，基础不同，学起来有不同感受。国内高数教学方式...

在中文修订版的601页。说是根据两个不等式 $x-3 > -\epsilon/8$ 和 $x > 2$ 可以得到新的不等式：
 $(x-3)(x+3) > (-\epsilon/8)(2+3)$ 已知的是 $0 < \epsilon < 8$ 那么，让我们假设， $x = 2.88 > 2$ ， $\epsilon = 1 < 8$
则 $x-3 = -0.12$ ， $-\epsilon/8 = -0.125$ ，满足 $x-3 > -\epsilon/8$ 于是 $(x-3)(x+3) = -0.12 * 5.88 = -0.7056$...

写得比较有趣但是也就仅此而已，作为教材的话吧有没有习题，作为参考书的话吧觉得我读美国的微积分教材并没有遇到太大的问题总而言之这本书没有对我起到太大的作用，另外这本书的内容是作者的讲课视频改过来的大家可以到网上搜搜。

[The Calculus Lifesaver_下载链接1](#)