



**AP<sup>®</sup> Calculus AB, Calculus BC**  
**2006 Instructions for Section II**

Time – 1 hour and 30 minutes

Percent of total grade – 50

Part A: 45 minutes, 3 problems

Part B: 45 minutes, 3 problems

**PART A (A graphing calculator is required for some problems or parts of problems.)**

During the timed portion for Part A, you may work only on the problems in Part A. The problems for Part A are printed in the green insert only. When you are told to begin, open your booklet, carefully tear out the green insert, and write your solution to each part of each problem in the space provided for that part in the pink exam booklet.

On Part A, you are permitted to use your calculator to solve an equation, find the derivative of a function at a point, or calculate the value of a definite integral. However, you must clearly indicate the setup of your problem, namely the equation, function, or integral you are using. If you use other built-in features or programs, you must show the mathematical steps necessary to produce your results.

**PART B (No calculator is allowed for these problems.)**

The problems for Part B are printed in the blue insert only. When you are told to begin, open the blue insert, and write your solution to each part of each problem in the space provided for that part in the pink exam booklet. During the timed portion for Part B, you may keep the green insert and continue to work on the problems in Part A without the use of any calculator.

**GENERAL INSTRUCTIONS FOR SECTION II PART A AND PART B**

For each part of Section II, you may wish to look over the problems before starting to work on them, since it is not expected that everyone will be able to complete all parts of all problems. All problems are given equal weight, but the parts of a particular problem are not necessarily given equal weight.

- YOU SHOULD WRITE ALL WORK FOR EACH PART OF EACH PROBLEM WITH A PENCIL OR PEN IN THE SPACE PROVIDED FOR THAT PART IN THE PINK EXAM BOOKLET. Be sure to write clearly and legibly. If you make an error, you may save time by crossing it out rather than trying to erase it. Erased or crossed-out work will not be graded.
- Show all your work. Clearly label any functions, graphs, tables, or other objects that you use. You will be graded on the correctness and completeness of your methods as well as your answers. Answers without supporting work may not receive credit.
- Justifications require that you give mathematical (noncalculator) reasons.
- Your work must be expressed in standard mathematical notation rather than calculator syntax. For example,  $\int_1^5 x^2 dx$  may not be written as  $\text{fnInt}(X^2, X, 1, 5)$ .
- Unless otherwise specified, answers (numeric or algebraic) need not be simplified.
- If you use decimal approximations in calculations, you will be graded on accuracy. Unless otherwise specified, your final answers should be accurate to three places after the decimal point.
- Unless otherwise specified, the domain of a function  $f$  is assumed to be the set of all real numbers  $x$  for which  $f(x)$  is a real number.