| Name: | Date: | Period: |
|-------|-------|---------|
|       |       |         |

#### Important Tips & Information about the AP Calculus Exam

#### If you don't know the answer... make an educated guess!

Don't leave problems blank. (This is especially true on the multiple choice!) There is no guessing penalty.

## Your work on the Free Response will be graded on... the correctness and completeness of your methods.

Answers without supporting work may not receive credit.

Be sure to include ALL derivatives, integrals, theorems, limits, etc. that you use to find your answer!

#### **Problem Solving Advice:**

- 1) Read the problem.
- 2) Do the work.
- 3) Read the problem AGAIN! Check to be sure you gave the answer to the question asked. If the question asks you to provide the y-intercept, and you give the answer y = 2, your answer is WRONG. The y-intercept is a point and must be written as a coordinate pair: (0, 2).

#### **CALCULATOR INFORMATION**

#### Be sure your calculator is set in ... RADIAN MODE!

This is assumed to be true on all problems on the AP exam unless specifically instructed otherwise.

### Round to... 3 DECIMAL PLACES!

This is assumed to be true on all problems on the AP exam unless specifically instructed otherwise.

## The only things you are allowed to use your calculator for are:

- 1) Graphing
- 2) Finding a derivative at a specific x-value. (Ex: f'(3) = 9.314)
- 3) Definite Integrals (Ex:  $\int_{2}^{6} f(x) dx = 16,218$ )
- 4) Solving equations. (Ex: Calculating zeros and intersections of graphs).

Never use the calculator to do any regressions!

### Work and justification must be mathematical... Never in calculator language or syntax.

DON'T say: I put the function in Y = and used the calculator to find the zeros.

DO say: 
$$f(x) = 0$$
 at  $x = .247$  and  $x = 1.752$ 

## How to STORE a number in your calculator for use again later:

STO>

ALPHA

Then type any letter.

#### The most common AP Calculus test errors are:

- 1) Premature rounding
- 2) Simplifying incorrectly
- 3) Units
- 4) IT
- 5) Answering in the wrong space
- 6) Not using the graphing calculator

## When the time comes to study for the exam... look at Released Exams for practice.

#### **Before the test:**

Put new batteries in your calculator.

Get a good night of sleep.

Eat a healthy breakfast.

### Things to bring to the test:

Sharpened pencils

Eraser

Snacks (quiet and not messy)

Water

Kleenex

Jacket or hoodie

Calculator with new batteries

Watch

Formulas to look over before the test

#### While taking the test:

- Don't let the points at the beginning of the exam keep you from getting the points at the end. If you can do part c without doing parts a and b, do it.
- If you need to import an answer from part a, make an attempt at part a so that you can import the (possibly wrong) answer and get all the points for part c.
- Do not waste time erasing bad solutions on the free response section. If you change your mind about a solution, cross out the bad solution AFTER you have written the good one. Crossed out work will not be graded. If you have no better solution, leave the old one there. It might be worth a point or two.

| EXAM FORMAT Total Time: 3 Hours 15 Minutes |   |  |  |  |
|--|---|--|--|--|
| Section 1<br>Part A                        | MULTIPLE CHOICE: NO CALCULATOR 60 minutes, 30 questions   |  |  |  |
| Section 1<br>Part B                        | MULTIPLE CHOICE: WITH CALCULATOR 45 minutes, 15 questions |  |  |  |
| One 10 Minute Break                        |   |  |  |  |
| Section 2<br>Part A                        | FREE RESPONSE WITH CALCULATOR 30 minutes, 2 questions     |  |  |  |
| Section 2<br>Part B                        | FREE RESPONSE NO CALCULATOR 60 minutes, 4 questions       |  |  |  |

# **SCORING:**

Multiple Choice: 50% Free Response: 50%

Each Free Response is worth 9 points. (There are 6 problems for a total of 54 points.)

| AP<br>Score  | College Recommendation *Note check with the colleges you are applying to because different colleges have different requirements!* | Letter<br>Grade<br>Equivalent   | Composite<br>Point Total<br>Range | Numerical<br>Percentage<br>Range |
|--|---|---|-----------------------------------|----------------------------------|
| 5  | Extremely Well Qualified to Receive College Credit  | A   | 68 – 108                          | 63% - 100%                       |
| 4  | Well Qualified to Receive College<br>Credit   | В   | 52 – 67                           | 48% - 62%                        |
| 3  | Qualified to Receive College<br>Credit  | С   | 39 – 51                           | 36% - 47%                        |
| 2  | Possibly Qualified to Receive College Credit  | D   | 27 – 38                           | 25% - 35%                        |
| 1  | No Recommendation to Receive College Credit   | F   | 0 - 26                            | 0% - 24%                         |
| Students in BC Calculus will receive an AB Sub-Score. It is possible for them to earn credit for 1 or 2 semesters of College Calculus. |   | *Scoring Ranges vary<br>slightly from year to year<br>based upon the data the<br>College Board receives<br>about the test results.* |                                   |                                  |