

Calculus 1 IBDPE Final Exam Info

Time and Location

Wednesday, January 13, 2015 10:10-12:00 at D.A.E. 5825 (for Odd student ID number) and D.A.E. 5824 (for Even student ID number).

Seat and Student ID

Seats will be assigned according to the seat chart posted in front of the classroom. Please check it before you take your seat. You *MUST* bring your student ID for verification.

Ground Rules

- Closed book. No notes. No calculator. The only allowed items on your desk are pen/pencil, erasers/whiteout, and ruler. No food is allowed. Coffee or beverage is allowed, although discouraged.
- Please use the bathroom before the exam. If you absolutely have to go to bathroom during the exam, you need to go to the designated ones that we have inspected before the exam. You also need to verify to me that your pockets are empty before you go.
- No hat nor sunglasses may be worn unless required by medical condition.
- ABSOLUTELY no electronic device may be turned on during the exam. Any voice from cellular phone is considered cheating.
- No makeup exam.
- Regrade: please see the syllabus for regrade policy.

Tools

Only writing tools are allowed during this exam.

Format

The exam consists of two parts. The first part has 3 problems on the material taught after midterm 2. You are *required* to do ALL of them. The second part contains 7 problems on the material covered by midterm 1 and midterm 2. You will choose 5 problems to do. Each problem is worth 25 points, and the exam total is 200. The recorded score, however, is in percentage. (e.g. if you score 160, your recorded score is 80.)

Topics to Cover

The exam covers the entire semester. Specifically, it includes the topics listed in exam 1, exam 2 info sheets, and...

- Transcendental Functions: Properties of exponential functions and logarithms of arbitrary powers and bases, decays and growth problems, basic computations involving inverse trigonometric functions and hyperbolic functions.
- Techniques of Integration: Perform integration with reasonable difficulties involving techniques introduced in class. Make sure you are familiar with basic trigonometric identities.
- Improper integrals/L'Hospital's Rule: Be able to determine, with reason, the convergence behavior of improper integrals. Be able to compute limits using L'Hospital's rule.

Study Suggestions

- Get enough sleep the night before the exam.
- Practice homework problems THOROUGHLY and be able to appreciate the insight of the problems so that you can do those problems in any forms and with moderate variations. Exam problems are modelled on homework problems.
- This exam emphasizes on conceptual understanding rather than mechanical computations. If you are stuck in long computations, it is recommended to rethink your process and see if you are forgetting some part of the concepts.