

Session 06-06 - Mock Exam: Calculus

Section 06: Integral Calculus

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Mock Exam Session

Welcome to Mock Exam 06

Comprehensive Assessment: Differential and Integral Calculus

- This exam covers Sections 05 and 06 (Differential & Integral Calculus)
- Total: 100 points across 3 problems
- Working time: 180 minutes (plus 15 min reading)

Permitted Aids

What You Can Use

- Non-programmable calculator (no graphing)
- Drawing instruments (ruler, compass)
- Monolingual dictionary

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Not Permitted

- Formula sheets or notes
- Programmable/graphing calculators
- Electronic devices

Success Strategies

Critical Exam Tips

Maximize Your Performance

Time Management:

- Allocate time proportionally: ~0.7 minutes per point
- Don't get stuck! Move on after 10 minutes without progress
- Save 10-15 minutes at the end for review

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Problem Selection:

- Start with the problem that feels most comfortable
- Secure foundation points first (parts a-c typically)
- Partial credit is available - show your method even if incomplete

What to Do During the Exam

Systematic Approach

For Each Problem:

1. Read carefully - every word matters, especially units and restrictions
2. Identify what's given and what you need to find
3. Plan your approach before writing
4. Show all work - clear steps earn partial credit
5. Label everything - variables, units, axes, key points
6. Verify solutions - substitute back when possible
7. State conclusions in complete sentences when asked

Logistics & Next Steps

Examination Procedure

During the Exam:

- Work silently and independently
- Raise your hand if you need clarification (factual only, no hints)
- You may leave early if finished, but cannot return
- Submit all work sheets (including scratch paper if used)

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After the Exam:

- Take a well-deserved break!
- Don't stress about what you couldn't complete

Course Summary

What We've Covered in Integral Calculus

- Session 01: Antiderivatives & Indefinite Integrals
- Session 02: Definite Integrals & FTC
- Session 03: Area Problems & Basic Applications
- Session 04: Area Between Curves & Economic Surplus
- Session 05: Integration by Parts & Synthesis
- Session 06: Mock Exam

Next Section Preview

Session 07: Probability & Statistics

Next time we will:

- Review Mock Exam solutions in detail
- Begin Section 07: Probability & Statistics
- Introduce descriptive statistics

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Preparation:

- Review any topics you found challenging today
- Bring specific questions about exam problems
- Don't worry if some parts were difficult - that's the point of practice!