Session 06-07 - Oral Exam Practice II

Section 06: Integral Calculus

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Welcome

Oral Practice, Round Two

Same format, fresh topics

- You know the drill from Oral Practice I: groups of three, rotating roles
- **Block A:** 30 minutes preparation, then free-speech presentation with follow-ups
- **Block B:** spontaneous discussion of an impulse from a *different* area
- Requirement levels: **[I]** reproduce · **[II]** apply · **[III]** evaluate

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Tip

Format details: oral exam guide.

Today's Topic Sets

Sets 11, 13 and 15 - handed out in class

- **Set 11:** Curve sketching of a quartic · Cost & profit (revenue vs. profit maximum)
- **Set 13:** Consumer & producer surplus (integrals) · Probability (two dice, complement)
- **Set 15:** Unit cost & price floor · Rational function analysis
- Fresh from Sections 5-6: derivatives, curve sketching, and integration are fair game

Focus of This Round

Presenting a Solution Path

This round's training goal: the Block A presentation

- Open with a **roadmap**: "I will first find the zeros, then the extrema, then sketch."
- Work **stepwise**, naming each rule you use (product rule, FTC, …)
- Point at your sketch: axes, intercepts, extrema - **labelled**
- Close with an **interpretation**: what does the area / the maximum *mean* here?

Examiner Craft

If you are the examiner:

- Let the candidate finish their roadmap before interrupting
- Use the key's follow-ups in order - start at level **[I]**, escalate to **[III]**
- If an answer is wrong, ask "Are you sure? Check the sign." **once** before correcting
- Note one strength and one weakness for the feedback round

Practice Rounds

Rounds One and Two

- **Preparation:** 30 minutes (candidate) - examiners study their key
- **Exam conversation:** ~20 minutes (Block A + follow-ups, then Block B impulse)
- **Feedback:** 10 minutes - observer first, then examiner, then self-assessment
- Rotate roles and topic sets for round two

Coffee Break - 15 Minutes

Final Round

Round Three

Last rotation - everyone has now been candidate once

- Use the feedback from your group actively
- Examiners: push one level higher than you did in round one

Wrap-Up

Key Takeaways

- A good Block A presentation follows a **roadmap** and ends with an interpretation
- Integrals in economics always come with a **meaning**: total cost, surplus, average
- Note which vocabulary you were missing - that gap is fixable this week
- Next oral round comes after the probability mock

Next Session Preview

Session 07-01: Descriptive Statistics Essentials

- We start **Section 07: Probability & Statistics**
- Mean, median, spread - and why business decisions depend on them

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> Preparation
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> Rework one topic you examined today **as the candidate** - out loud, alone, with a timer.