

Grading of the oral presentations

30-minute presentation in pairs

The grade is common to both presenters and is based on the following three broad categories:

- Mathematical Content (8 points)
- Clarity and Organization (6 points)
- Presentation and Teamwork (6 points)

Details on Categories and Criteria:

I. Mathematical Content — 8 points

The mathematics is correct and the presenters demonstrate genuine understanding of the subject. Arguments are given at an appropriate level of detail for the audience, and formal statements are accompanied by conceptual explanations when useful.

- Key definitions, statements, examples, and proof ideas are mathematically accurate.
- The level of sophistication is appropriate for the audience.
- The amount of material is well chosen: the presenters decide what to prove, sketch, or admit, and make significant omissions explicit.
- Notation is defined and used consistently.
- Both presenters understand the overall mathematical content, including the part presented by their partner.
- The pair answers questions accurately on the whole talk; the answers reveal understanding rather than memorization.

II. Clarity and Organization — 6 points

The talk has a clear mathematical message. Context and motivation are given, the structure serves the main ideas, and the audience can follow how each part contributes to the whole.

- The presentation fits within 30 minutes. Substantial time-management problems, or failure to reach the main result through poor selection, lower this category.
- The overall structure is clear and announced or otherwise easy to perceive.
- The main results and the role of intermediate steps are clearly identified.
- Examples, pictures, or special cases are used when they genuinely clarify the mathematics.
- Terminology, theorem statements, and proof strategies are explained at the level needed by the audience.
- The presentation is robust: after briefly losing the thread, an attentive listener can recover where the argument is going.

III. Presentation and Teamwork — 6 points

Delivery is clear, prepared, and engaging. The two presenters form a coherent team, and the visual support—slides and/or board work—helps rather than competes with the mathematics.

- Voice, pace, and diction are clear and appropriate.
- Slides or board work are readable; mathematical notation is typeset or written correctly, and sources are acknowledged when appropriate.
- Participation is reasonably balanced, with smooth transitions: the talk feels like a single presentation rather than two mini-talks.
- The presenters engage with the audience and adjust the exposition when useful.
- Preparation and rehearsal are evident, without giving the impression of reading a script.

Characteristics of an excellent talk

An excellent talk does more than transmit correct material: it guides the audience through a mathematical idea. In particular:

- The presenters choose a clear focus and use it to decide what to include and what to omit.
- They anticipate the background knowledge of the audience and supply the reminders, definitions, or examples needed to make the main ideas accessible.
- They distinguish essential ideas from subsidiary details, spending time in proportion to mathematical importance rather than technical length, and make deliberate choices about what to prove, sketch, or omit.
- They make proof structure visible: the audience understands why an argument is being given, what the key step is, and which details are routine.
- They use examples, questions, reformulations, or pauses strategically so that difficult concepts have time to be absorbed.
- The two speakers support a single narrative: transitions are natural, notation and terminology are shared, and both can situate the other speaker's part in the overall argument.
- The talk remains intelligible even if a listener misses a short passage, because important points are signposted, summarized, or kept visible.
- The presenters monitor whether the audience is following and, when useful, adjust the exposition accordingly.

Indicative grading descriptors

The descriptors below should be thought as guides.

Category	Excellent	Good	Developing	Insufficient
Mathematical Content (8 pts)	7–8 Accurate, selective, conceptually understood; proof choices are appropriate; answers to questions show strong understanding.	5–6 Mostly accurate and understood; some imprecision, uneven depth, or imperfect choices about what to prove or omit.	3–4 Partial understanding; important points are unclear, overdeveloped, omitted without explanation, or insufficiently justified.	0–2 Major errors, serious gaps in understanding, or content inappropriate to the level.
Clarity & Organization (6 pts)	5–6 Clear message, strong structure, sensible time allocation; the main result is reached within 30 minutes and the audience can follow the logic.	4 Generally clear and coherent; some weak transitions, motivation, or time allocation.	2–3 Structure is visible but uneven; main ideas are obscured by detail, poor selection, or weak time management.	0–1 Difficult to follow; little discernible structure, or serious time-management problems prevent the main point from being reached.
Presentation & Teamwork (6 pts)	5–6 Clear, engaging, well-rehearsed; visual support is effective; the pair works as one team.	4 Competent delivery and teamwork with a few noticeable weaknesses in pace, support, or coordination.	2–3 Uneven delivery, visual support, or division of roles; coordination is limited.	0–1 Delivery or teamwork substantially prevents the audience from following the mathematics.