

Your First Rehearsal: The Spoken Talk

Day3 Worksheet · REU 2026

Name: _____

Your slides are built. The talk, though, lives in your *mouth*, not on the screen. This first run is about finding that spoken layer: how you enter each slide, how you say the math out loud, and how you keep the room with you. Read the craft below, then write your script slide by slide.

The Delivery Craft

1. The first slide is your ice-breaker. It is social, not mathematical. Greet the room, thank the organizers, say you are glad to be here, name it as joint work and credit your collaborators, then ease in.

Model (say it your own way):

Good afternoon, everyone. First, I'd like to thank the organizers for the invitation. I'm glad to be here and excited to share the research we did this summer. This is joint work with [names]. Let's see what we found.

2. The problem slide is your anchor. Do not lose anyone here. Everything is built on it, so go slow and fully descriptive. Say every notation, parameter, and the domain in words, and narrate the *why* of the notation, not just the symbol.

Model (say it your own way):

Here we have a second-order discrete derivative. You may be wondering why r_k sits in front of the derivative. That's the quasi-derivative; it acts as a correcting factor, and it's what makes our operator self-adjoint.

3. Use your voice as an instrument. Say the key facts out loud with weight. Vary your pitch, low, medium, high; do not drone in one register. Pause after the important line and let it land. Mark your script: $\uparrow$ where you lift, $\downarrow$ where you drop, $\parallel$ where you pause.

4. Keep bringing the audience on board. Thread small hooks through the talk so the room stays awake:

- “Are you all with me so far?”
- “You may be wondering why this...”
- “Please feel free to stop me if you have a question.”
- “Look at this expression, do you notice θ_k is actually a function of λ ?”

On a few slides, stop and genuinely check for questions before moving on.

Your Slide-by-Slide Script

For each slide, write what you will *say*. Pencil the voice marks ($\uparrow$ $\downarrow$ $\parallel$) right where they belong.

Slide 1 — Opening (ice-breaker)

social, warm, credit collaborators

Your greeting and thanks:

Name the work and collaborators, then ease in:

Slide 2 — The Problem (ANCHOR: slowest, fullest)

every symbol in words

Transition in:

Walk every notation, parameter, domain, in words, and the why:

Audience beat (check they are with you):

Slide 3Pace: ☐ anchor/slow ☐ normal

Voice: ↑ lift ↓ drop || pause

Transition in (bridge from the slide before):

Say in words / narrate (each symbol in words; tell the story where the math earned it):

Audience beat (stop, ask, or point):

Slide 4Pace: ☐ anchor/slow ☐ normal

Voice: ↑ lift ↓ drop || pause

Transition in (bridge from the slide before):

Say in words / narrate (each symbol in words; tell the story where the math earned it):

Audience beat (stop, ask, or point):

Slide 5Pace: ☐ anchor/slow ☐ normal

Voice: ↑ lift ↓ drop || pause

Transition in (bridge from the slide before):

Say in words / narrate (each symbol in words; tell the story where the math earned it):

Audience beat (stop, ask, or point):

Slide 6Pace: ☐ anchor/slow ☐ normal

Voice: ↑ lift ↓ drop || pause

Transition in (bridge from the slide before):

Say in words / narrate (each symbol in words; tell the story where the math earned it):

Audience beat (stop, ask, or point):

Slide 7Pace: ☐ anchor/slow ☐ normal

Voice: ↑ lift ↓ drop || pause

Transition in (bridge from the slide before):

Say in words / narrate (each symbol in words; tell the story where the math earned it):

Audience beat (stop, ask, or point):

Slide 8Pace: ☐ anchor/slow ☐ normal

Voice: ↑ lift ↓ drop || pause

Transition in (bridge from the slide before):

Say in words / narrate (each symbol in words; tell the story where the math earned it):

Audience beat (stop, ask, or point):

Slide 9Pace: ☐ anchor/slow ☐ normal

Voice: ↑ lift ↓ drop || pause

Transition in (bridge from the slide before):

Say in words / narrate (each symbol in words; tell the story where the math earned it):

Audience beat (stop, ask, or point):

Slide 10Pace: ☐ anchor/slow ☐ normal

Voice: ↑ lift ↓ drop || pause

Transition in (bridge from the slide before):

Say in words / narrate (each symbol in words; tell the story where the math earned it):

Audience beat (stop, ask, or point):

Slide 11Pace: ☐ anchor/slow ☐ normal

Voice: ↑ lift ↓ drop || pause

Transition in (bridge from the slide before):

Say in words / narrate (each symbol in words; tell the story where the math earned it):

Audience beat (stop, ask, or point):

Slide 12Pace: ☐ anchor/slow ☐ normal

Voice: ↑ lift ↓ drop || pause

Transition in (bridge from the slide before):

Say in words / narrate (each symbol in words; tell the story where the math earned it):

Audience beat (stop, ask, or point):

Slide 13Pace: ☐ anchor/slow ☐ normal

Voice: ↑ lift ↓ drop || pause

Transition in (bridge from the slide before):

Say in words / narrate (each symbol in words; tell the story where the math earned it):

Audience beat (stop, ask, or point):

Slide 14Pace: ☐ anchor/slow ☐ normal

Voice: ↑ lift ↓ drop || pause

Transition in (bridge from the slide before):

Say in words / narrate (each symbol in words; tell the story where the math earned it):

Audience beat (stop, ask, or point):

Slide 15Pace: ☐ anchor/slow ☐ normal

Voice: ↑ lift ↓ drop || pause

Transition in (bridge from the slide before):

Say in words / narrate (each symbol in words; tell the story where the math earned it):

Audience beat (stop, ask, or point):
