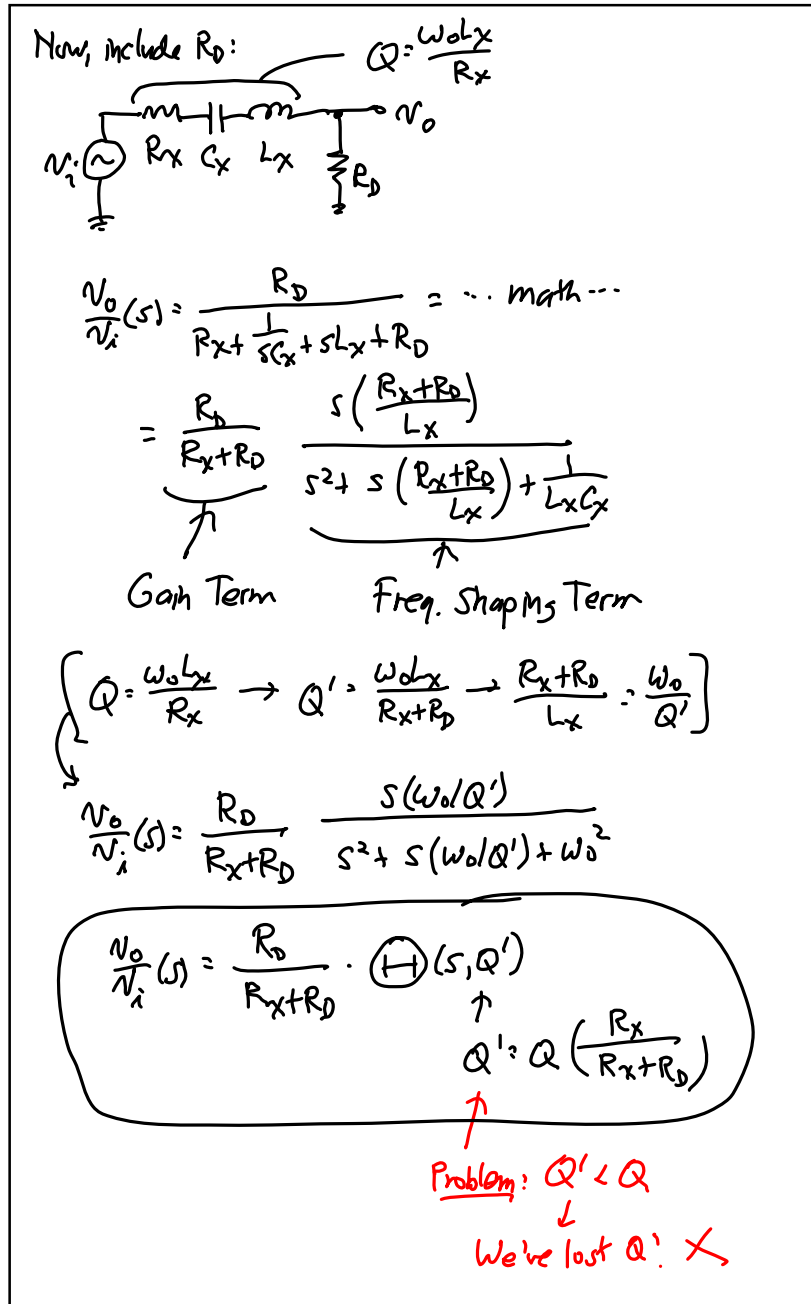
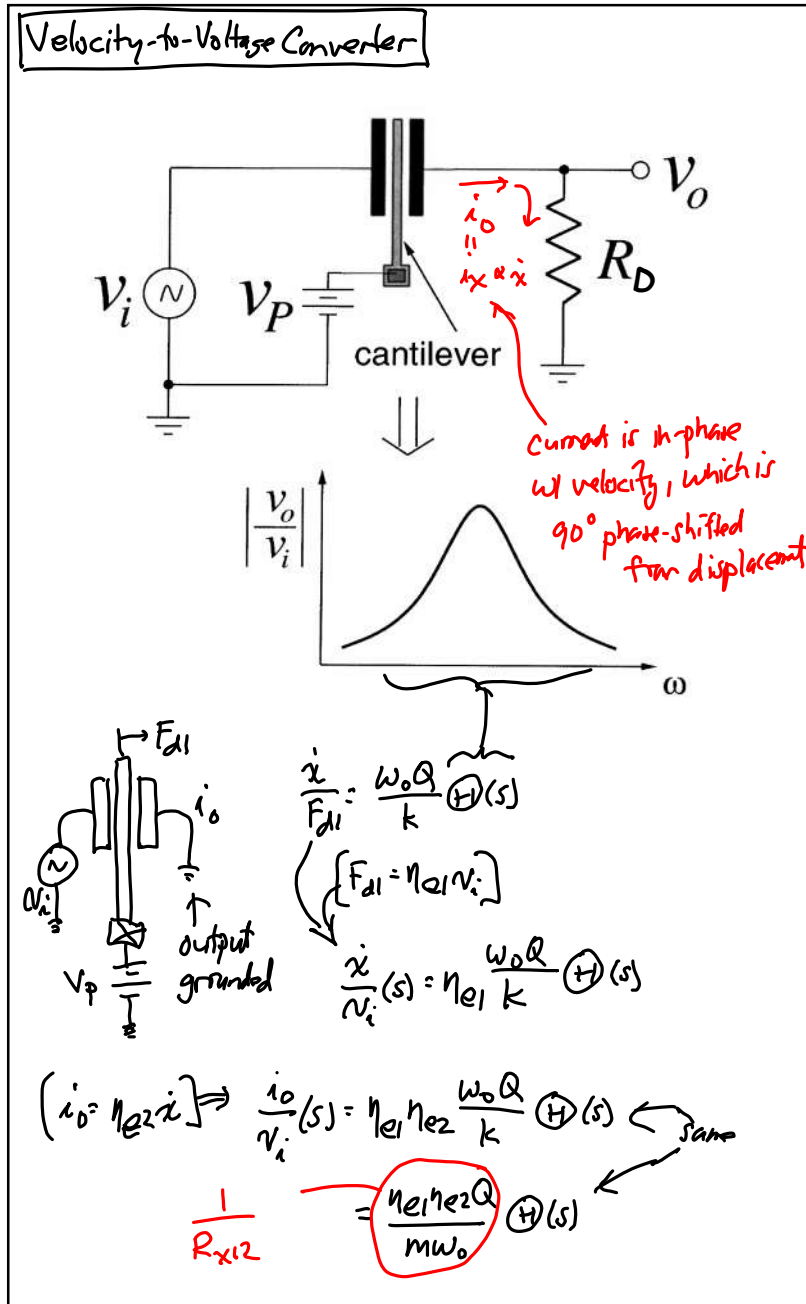
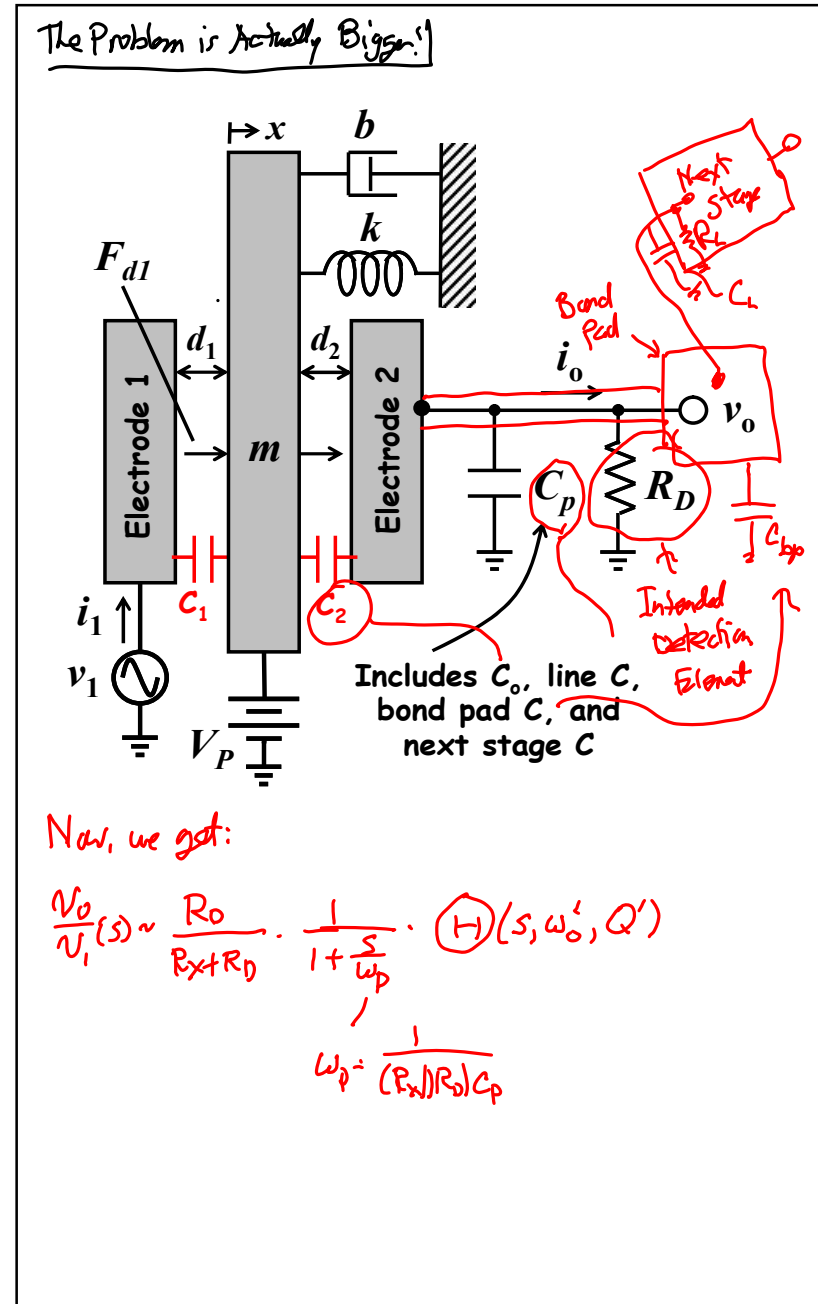
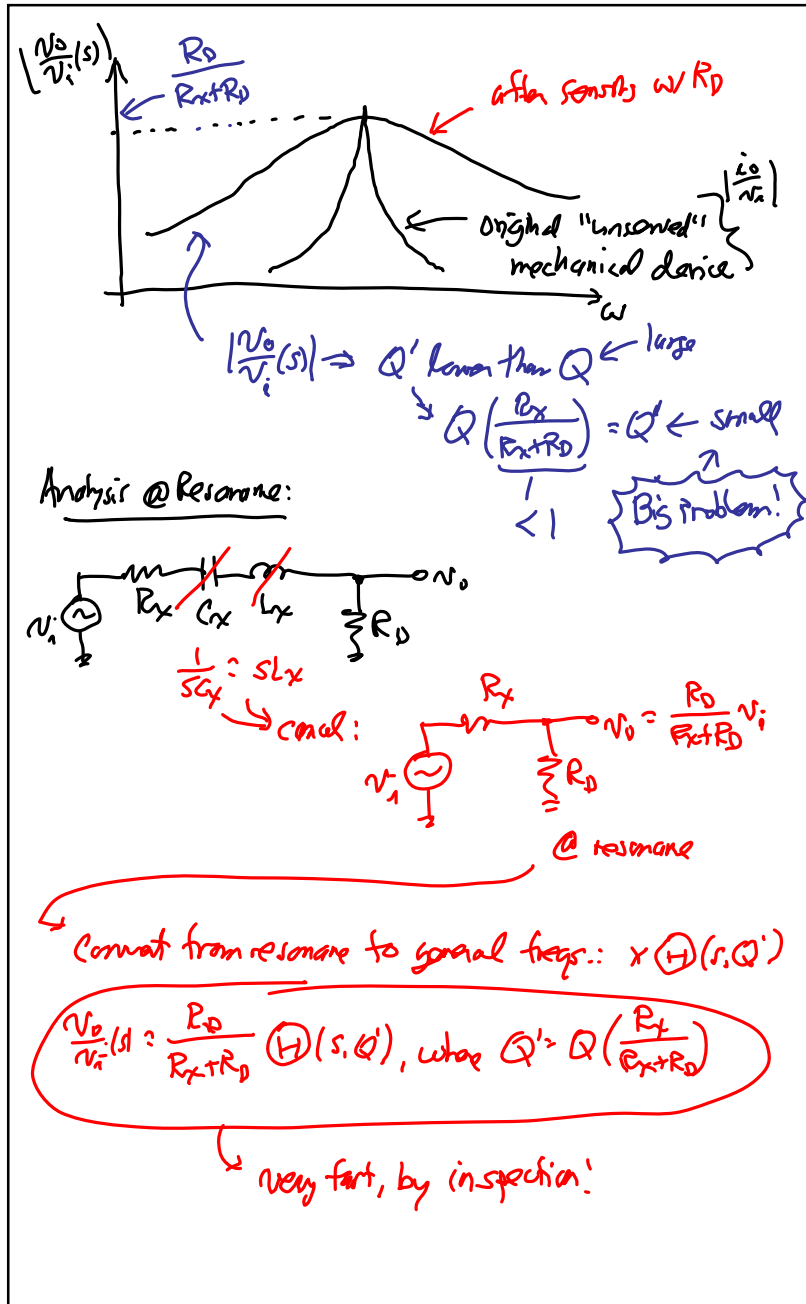


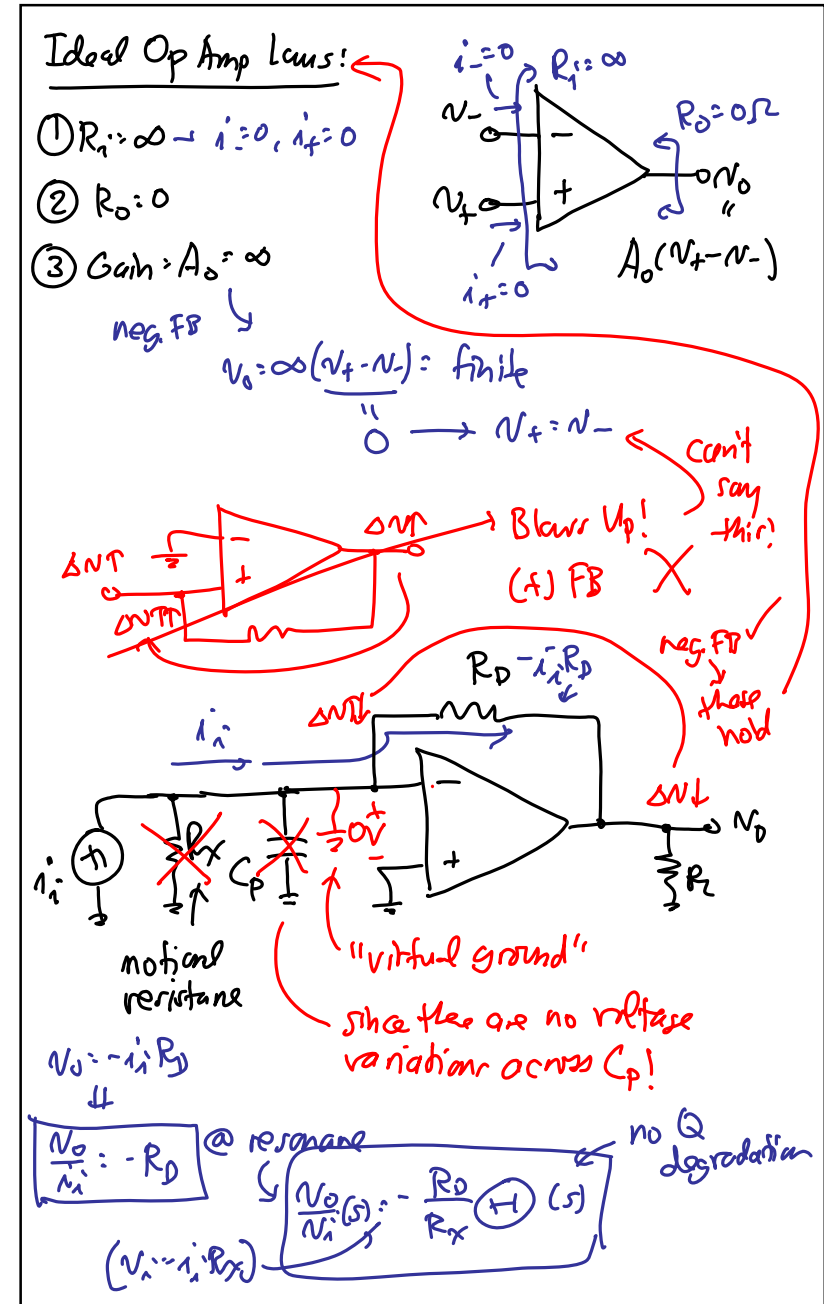
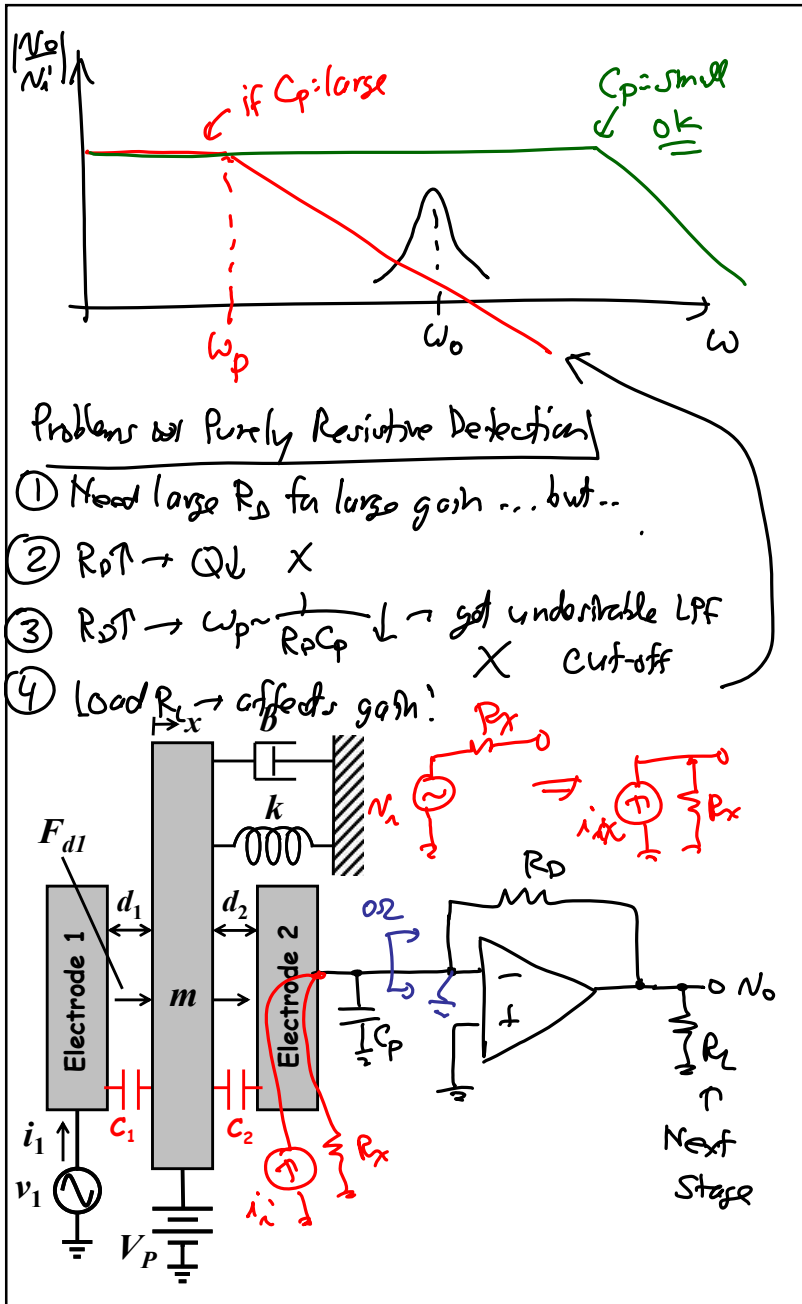
Lecture 25: Sensing Circuits II & Noise

- **Announcements:**
- I am at the EECS Faculty Retreat today; this is a pre-recorded lecture
- HW#7 online since Tuesday and due Friday, May 4, 10 a.m.
- Module 16 on Sense Circuit Non-Ideality and Integration online
- Module 17 on Noise & MDS online
- Project slide #2 due Friday, April 20
- Next Tuesday, I will be in Singapore, so again, the lecture will be recorded and on video
- Please watch both of these lectures before class on Thursday, next week
- -----
- Reading: Senturia, Chpt. 14
- Lecture Topics:
 - ↳ Detection Circuits
 - Velocity Sensing
 - Position Sensing
 - ↳ MEMS-Transistor Integration
 - Mixed
 - MEMS-First
 - MEMS-Last
- -----
- Next page ...

- -----
- Reading: Senturia Chpt. 16
- Lecture Topics:
 - ↳ Minimum Detectable Signal
 - ↳ Noise
 - Circuit Noise Calculations
 - Noise Sources
 - Equivalent Input-Referred Noise
 - ↳ Gyro MDS
 - Equivalent Noise Circuit
 - Example ARW Determination
- -----
- **Last Time:**
- Discussing velocity sensing; simplest way is via a resistive output load R_D
- Now, continue with this ...







- Now, go through position sensing slides in Module 14
- Then go through non-ideal op amp slides and integration in Module 16