Your homework grade includes an explicit 10% that reflects your ability to communicate the work well, including an interpretative statement about your result/mathematics.

1. **McIntyre 9.16** (working backwards …)
2. **McIntyre 9.17**
3. **McIntyre 9.22** (Fictitious problem, practicing with matrices)
   (a) What are the titles & who are the authors?
   (b) Write 100-200 words about how macroscopic quantum oscillators are becoming observable by experimentalists.
5. **McIntyre 10.1** (diagonalize matrix)
6. **McIntyre 10.10** ($\chi^3$ perturbation to HO)