Your Name:  
Rec. Instructor:

- You have one hour and 48 minutes for this final exam, and not more or less.
- The exam begins in your recitation room at the special date and time noted in the syllabus. For recitations in Smith Lab, a new room will be announced.
- Write your name and that of your recitation instructor on every sheet. After the first page, family name for each is enough.
- This exam is closed book, closed notes, and closed homework. No materials allowed.
- You may use a calculator. No cellphones may be used for any purpose.
- We provide an equation sheet at the end. You cannot use your own. It’s ok to tear it off.
- We provide a scratch sheet at the end. You cannot use your own. It’s ok to tear it off.
- All 36 multiple-choice problems are worth 5 points each, for a total of 180 points. You MUST put the correct letter in the space provided to obtain credit. If your writing is ambiguous, it will be marked as incorrect. No partial credit is given for multiple-choice problems.

- GENERAL ADVICE: Note the wording of the problems carefully, draw pictures, organize your data, and check your work at the end. Also, don’t forget to breathe! You can do these problems.

Unless told otherwise, neglect friction, air resistance, and other non-ideal conditions.