Engineering Homework Format

All homework problems, unless otherwise directed by your instructor, should follow the Engineering Format. This format is used for most professional engineering work. Unless otherwise directed by your instructor, you should use engineering paper or the equivalent for all homework assignments. Write only on the front side of the paper (the dark green grid should be on the back).

Please refer to the example on the next page.

Headers: The five boxes at the top of each sheet of engineering paper that you use for a homework assignment should contain the following information from left to right:

1. Put the staple (which is the required homework binder) in the first (small) box
2. Print your full name in the second (large) box. If this is a team homework, then print the team leaders name in the fourth box and the names of each participating team member below this box.
3. Print the course and section number in the third (large) box
4. Print the date that the assignment was completed in the fourth (large) box.
5. Print the page number / total number of pages in the fifth (small) box

Writing Mechanics: All homework should be:

1. Carefully printed and not written in cursive
2. Printed in pencil and not in ink
3. Neat and clean, i.e. printed on the lines with no smudges or cross-outs

Calculations: All homework calculations should:

1. Include at least one complete sample for every type of calculation presented
2. Include all units for each term in each equation and the units must balance
3. Use the appropriate number of significant figures (usually three) for all numbers
4. Clearly indicate the final solution by boxing it in with a rectangle

Problem Order: Problems should be presented

1. In the order assigned (one, two, three, etc.)
2. With a new problem starting on a new page of engineering paper
3. With the designated problem number, from textbook or professor, under box 2.
4. Using only the front side of each sheet of engineering paper

Problem Essentials: Problem solutions should include the following items in order:

1. Homework problem number listed at beginning of problem
2. The given information - the information that will be used to solve the problem
3. The required information - the information or solution that we are looking for
4. A straight-edge diagram or diagrams that clearly illustrate the problem
5. The solution of the problem including all required steps and calculations

Evaluation: Double-check all of your calculations to make sure that:

1. All of your math is correct, i.e. you made no errors in using the calculator or computer
2. All of your equations are correct, i.e. you made no errors in manipulating equations
3. All of your units balance, i.e. you derived the correct units for the desired solution

Computers: Homework Assignments using Computers

1. Show sample calculations (with units) for each spreadsheet calculation. A printout of a spreadsheet is not sufficient because of the difficulty in inferring formulas from the numbers. Spreadsheet formulas can be printed in addition to the sample calculation using the commands: Tools, Options, View tab, click in Formulas box under Window Options.
2. Do not printout raw data from data acquisition experiments. A graphical presentation of this data is sufficient unless otherwise requested from the professor.

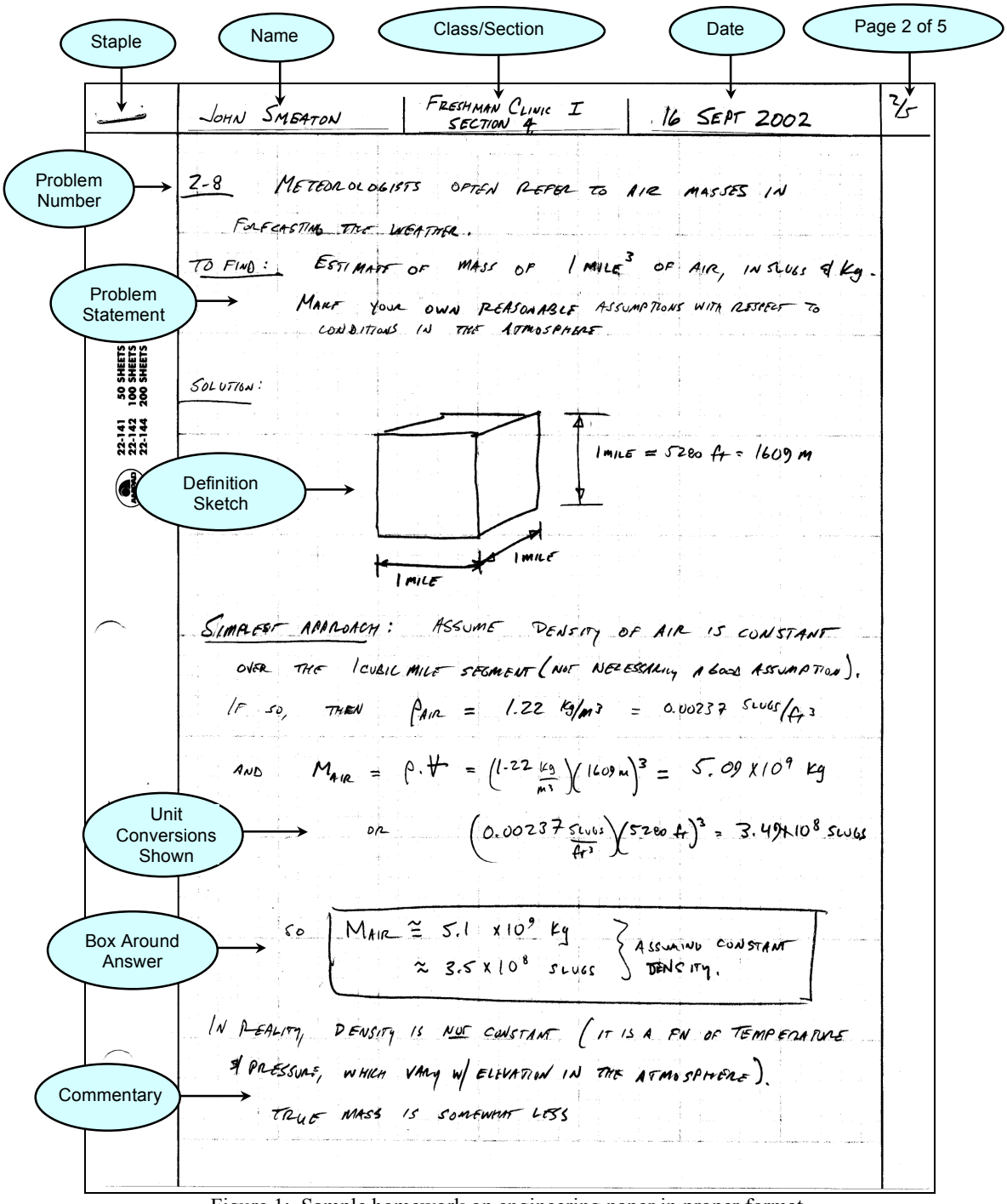

Figure 1: Sample homework on engineering paper in proper format.