

— HOMEWORK GUIDELINES —

Mathematics is a language, and as such has standards of writing which should be observed. In a writing class, one must respect the rules of grammar and punctuation, one must write in organized paragraphs built with complete sentences, and the final draft must be a neat paper with a title.

Similarly, there are certain standards for mathematics assignments:

- **Write your name and class number clearly at the top** of at least the first page, along with the assignment number, the section number(s), or the page number(s). If you are not stapling or paper-clipping the pages together, then put your name or initials on every page.
- **Use standard-sized paper** (8.5" x 11"), with no "fringe" running down the side as a result of the paper's having been torn out of a spiral notebook, and do not use sticky-notes, scented stationery, or other nonstandard types of paper. **Use standard-weight paper**, not onion skin, construction paper, or otherwise abnormally thin or heavy paper.
- **Attach your pages with a paper clip or staple.** Do not fold, tear, spit on, or otherwise "dog-ear" the pages. It is better that the pages be handed in loose (with your name on each sheet) than that the corners be folded or shredded.
- **Clearly indicate the number of the exercise you are doing.** If you accidentally do problems out of order, or part of a problem is separated from the rest of a problem, include a note, referring the grader to the missed problem or missing work.
- **Write out the problem that you are working on** (except in the case of word problems, which are too long to write out).
- **Do your work in pencil**, with mistakes cleanly erased, not crossed or scratched out. **If you work in ink, use "white-out" to correct mistakes.** Write legibly (suitably large and suitably dark); if the grader can't read your answer, it's wrong.
- Write neatly across the page, with each succeeding problem below the preceding one, not off to the right. **Do not work in multiple columns down the page** (like a newspaper); your page should contain only one column.
- **Keep work within the margins.** If you run out of room at the end of a problem, please continue onto the next page; do not try to squeeze lines together at the bottom of the sheet. Do not lap work over into the margins on the left or right; do not wrap work around the notebook holes. The margins are "For Office Use Only".
- Do not squeeze the problems together, with one problem running into the next. **Use sufficient space for each problem**, with at least one blank line between one problem and the next.
- Do "scratch work," but do it on scratch paper; hand in only the "final draft." Show your steps, but **work that is scribbled in the margins belongs on scratch paper, not on your homework.**
- For graphs and tables, **use a ruler to draw the straight lines**, and label the points of interest, including columns, axes, and scale, as appropriate. Use an appropriate consistent scale on the axes, and do a T-chart, unless otherwise instructed. Also, **make your tables and graphs large enough to be clear.**

- **Show your work.** This does not mean just copying the problem from the book and the answer from the back. Show all the steps that go between the question and the answer. Show how you derived the answer. For your work to be complete, you need to explain your reasoning and make your computations clear. That means using English sentences if the mathematical sentences are not otherwise clear.
- Use standard notation and language. **Do not invent your own notation or abbreviations**, and expect the grader to figure out your meaning. Spell out words. For example, do not use “#” in your sentence, if what you mean is the word “pounds” or “numbers”.
- Do not use the “equals” sign (“=”) to stand for “leads to”, “indicates”, “is related to”, “is”, or anything else inside a written sentence; instead, use the actual words. **The “equals” sign should be used only to indicate “is equal to” within an equation.**
- **Don’t do magic:** plus/minus (“±”) signs, “= 0”, radical symbols, and denominators should not disappear in the middle of your computations, only to mysteriously reappear at the end. Each step in a problem should be complete.
- If the problem is of the “Explain” or “Write in your own words” type, then copying the answer from the back of the book, or the definition from the chapter, is unacceptable. You should **write the answer in your words**, not the text’s.

Remember to **put your final answer at the end of your work, and mark it clearly** by, for example, underlining it. Label your answer appropriately; if the question asks for measured units, make sure to put appropriate units on the answer. **If the question is a word problem, the answer should be in words.**

- **In general, write your homework as though you are trying to convince someone that you know what you are talking about. Imprecision and gaps in reasoning will work against this aim.**

You should use your instructor as a study aid, in addition to the text, study guides, study groups, and tutoring services. Your work is much easier to grade when you have made your work and reasoning clear, and any difficulties you have in completing the assignment can be better explained to you by the grader if you have made your meaning clear. More importantly, however, completely worked and corrected homework exercises make excellent study guides for the Final. Also, if you develop good habits while working on the homework, you will generally perform better on the tests.

In summary, some of the primary educational goals that schools of today have for their students are the improvement of essential communication skills, the provision of significant and meaningful learning experiences, and the development of the workforce. As such, schools want their instructors to guide their students toward a higher level of confidence and competence. In math classes, these goals translate into a greater need for clarity in mathematical writing. The intention of these “Homework Guidelines” is that you and your instructor communicate better, and that you succeed both in this mathematics course and in future mathematical communication with co-workers and clients.

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