

# GRADING YOUR QUIZZES

## OVERVIEW

People often learn more from their mistakes than from what they do correctly. That's because when they don't make a mistake, they don't spend much time struggling to understand, so it's not a very memorable experience. On the other hand, if they make a mistake, they have to struggle to understand why it's wrong – is it their work (algebra) or their logic that's incorrect? This process usually requires them to look closely at what the correct logic and algebra are, what parts of the logic and algebra they got wrong, and what they need to correct in their thinking. This all helps to reinforce the material in a more memorable way.

## GRADING SCHEDULE

This brings us to your quizzes: you will be required to grade them yourselves (you will NOT grade your midterms or final exam). The idea is for you to compare your work against my solution, and learn from the mistakes that you made. (It will also give you a sense of what I will be looking for when I grade your midterms and final exams, which are worth considerably more points than the quizzes.) If you take a quiz on a certain day, I will usually post a solution with a grading key online before the next class, you will receive a copy of your quiz back (I will keep the original), and you will be required to grade and resubmit your graded quiz within 3 days. **If you do not resubmit the graded quiz by the deadline, you will receive 0 for the quiz (even if it was entirely correct).** Your score will depend much more on how you arrived at your final answers than the answers themselves.

## DEFENDING YOUR WORK

If you solve a problem using a different approach than mine, but you think it is an equally acceptable alternative, you must come to me (eg. at office hours) and defend your work. You must explain why your method is different and yet also valid, and you must prove that your work is logically and algebraically correct. It is NOT enough to simply say your final answer is the same. Your logic and algebra must also be valid. If I agree that your solution is correct, I will sign off on it and you may receive full credit.

**You may also defend your work if you made a single algebra or arithmetic mistake that caused all your subsequent steps to be wrong.** Your subsequent work must be consistent with the mistake you made, your mistake must not reduce the amount or level of difficulty of the required work, and you must not make another algebra or arithmetic mistake. **(You must prove these conditions are true, which is where a great deal of your learning from your mistakes will come from.)** If I agree that your solution is otherwise consistent, I will sign off on it and you may receive partial credit (all credit except for the source of your algebra/arithmetic mistake). If you make more than one algebra or arithmetic mistake, you may receive partial credit up to the point where your second mistake was introduced.

You must defend your work no later than the day before the graded quiz is due. (If you wait until the day before the graded quiz is due to defend your work, you should expect to wait a while, since many other students will also wait until that last day.) **If you ask to defend your work on the day the graded quiz is due, you will receive 0 points for those questions.**

You are strongly encouraged to defend your work, for two reasons. First, looking through your errors will help you identify what not to do in the future. Second, students who defend their work to me find that they receive a lot of partial credit, as long as they are serious about identifying the source of their own mistakes.

## GRADING KEY

The grading keys for the quizzes are posted to my website sometime during the 3 days following each quiz.

Each grading key will show a proper solution (sometimes more than one) for each question that you must grade. Parts of each solution will be underlined, circled or boxed in red, with assigned points next to them. These are the steps you must show to earn credit for your solution. You will usually not earn much credit if you only provide the correct answer

without correct supporting work, since that would be indistinguishable from your copying an answer from another student.

When you grade your own quiz using the grading key, you will underline, circle or box **in red** the parts of your solution that match the underlined, circled or boxed parts of my solution, and you will write down the number of points assigned to that part. For each question, you will total the number of points you earned for that question in the SCORE field for that question. When you have graded all questions, you will total the number of points you earned on all the questions in the SCORE field for the quiz.

NOTE: Some questions will be graded by me – usually, these are the definitions, theorems and multiple choice questions. Those questions will have the SCORE fields filled in when you receive the quiz for self-grading. Remember to add those points to your total.

### **GENERAL ISSUES**

You must grade in red. There will be a demerit (equal to 10% of all points available) if you grade in any other color.

You will lose points if your work is not concise. That is, if you try the same problem using two or more different methods, each gives you a different answer and only one of them is correct, you will not earn full credit unless the incorrect methods are all neatly crossed out or erased on your original quiz. You will also lose points for disorganized work.

If you habitually give yourself too many points, I will give you a 0 for quizzes, because you are not identifying and learning from the mistakes you make.

NOTE: If you try to alter your work on the quizzes during self-grading, that is cheating and will result in you receiving an F in the class and being reported to the dean and Student Development for academic discipline. **(Be advised that I usually do not approach you about this type of cheating until very late in the quarter.)** If you wish to do corrections to your quiz, do them on separate paper and do NOT submit them.