## Jeff Anderson's Math 1D Exam 1 Corrections Form

The ability to thrive on timed, in-class exams is a learned skill. The more you practice, refine and improve your skill sets for in class exams, the better you will become. There are six phases to the process of test taking:

| Phase 1: Early planning | (Study Skills HW 1 \& 2: Plan ahead and budget energy) |
| :--- | :--- |
| Phase 2: Daily study rituals | (Study Skills HW 3: Focus on deep understanding) |
| Phase 3: Strategic practice | (Study Skills HW 4: Focus on quick recall and problem solving) |
| Phase 4: The night before | (Get sleep and plan to perform) |
| Phase 5: During the exam | (Apply test-taking skills) |
| Phase 6: After the exam | (Reflect via exam corrections and recalibrate) |

Phases $2-6$ are cyclical, meaning when you finish phase 6 you start back at phase 2 . These phases also happened simultaneously. In other words, during the week(s) immediately prior to an exam, you will likely complete phase 2 for new content while you are working on phase 3 for older content.

This exam correction activity is designed to help you complete phase 6 of the exam process. Remember, if you are really engaged with the exam process, your work is NOT over after you submit your exam. Indeed, after your instructor returns your graded work, you will want to budget time to look over your exam and reflect on your performance. Indeed, reflection is a critical piece of the learning equation: it is a form of retrieval practice. To actively reflect on your exam experience, ask yourself a list of questions including: What happened? What did I do? How did that work our?

This exam corrections activity will lead you through a guided reflection process. In order to learn from your exam performance, you will want to:

- Identify the strengths and weaknesses of your performance
- For the things you did well, why were you able to achieve these? What study habits led you to these successes? How can you develop and maintain these study habits moving forward? How would you apply these study habits to succeed in future quarters with other professors?
- For the mistakes that you made, why did you make these mistakes? What study habits led you to fail on these problems? What underlying assumptions did you make prior to this exam that led you to these study habits? What changes are you going to make to improve your performance? Get detailed here.

Below is a detailed description of the exam corrections process.

## How do I start my corrections? Complete the following two steps:

## STEP 1: REVIEW YOUR GRADED EXAM

- Identify all problems for which you did not earn full credit
- DO NOT erase anything of the original exam.


## STEP 2: FILL OUT PERFORMANCE OVERVIEW TABLE

Focus on the left side of the table titled "Original Exam: To be completed by student" (Columns 2-6);

For Columns 2-3:

- Identify all problems on which you earned full-credit
- Identify all problems on which you did NOT earn full credit

For Columns 5-6:

- For each problem, specify the number of points you earned.
- For each problem, specify the number of points you missed.


## What do I do next?

After you finish steps 1 and 2 above, then do the following:

## STEP 3: WRITE EXAM CORRECTIONS

On separate, blank, clean paper (not on the exam itself) redo all problems that you did not receive full credit for. Your solutions should be neat, organized and easy to read.
A. For free-response questions, show your work. Describe how you achieved the correct answer by demonstrating the necessary mathematical operations using step-by-step analysis.
B. Use English sentences, graphs, figures, tables, numerical values, analytic arguments, and formulas to support your work.

Do the problems in order: the first problem you missed should be first problem you write in your corrections, followed by the second problem you missed and so on

## STEP 4: IDENTIFY YOUR MISTAKES

- For each problem you did not earn full-credit on, DESCRIBE WHY YOU GOT THE PROBLEM WRONG.


## - WARNING: Without Step 4, you won't get credit.

How do I finish my corrections? To finish your corrections, be sure to do the following:

## STEP 5: IDENTIFY PATTERNS IN YOUR MISTAKES

- Find any patterns or trends in your mistakes. What do you notice was the most difficult part of this test for you?


## STEP 6: RESPOND TO EXAM REFLECTIONS QUESTIONS

- Respond to Exam Reflections Questions 2-4. Use full sentences. Describe your thoughts in detail. Demonstrate that you have thought deeply about your exam performance
- For question 2: give specific suggestions for action items you recommend to future students.
- For questions 3: give specific suggestions for strategies you would avoid if you retook this class.
- WARNING: Without Step 4, you won't get credit.

Getting Help? You may get help to complete the exam corrections from any of the following:
A. Jeff (in office hours or by appointment)
D. Private Tutor
B. STEM Center Staff
E. Anyone Else
C. Classmates or friends
F. Online Videos

If you decide to get help, be sure to:

- Have the person who helps you use scratch paper. Do not let your helper write on the exam corrections that you submit to Jeff.
- Rewrite each correction in your own handwriting on the exam correction document when you are sure that you understand the correct answer.
- Ensure the corrections that you submit represent your understanding.

When are exam corrections due? As an entire class, we will determine a fair and appropriate due date for this assignment based on class vote. I will recommend that we set a due date approximately two weeks after the day you get your graded exams back. However, we will discuss this together.

You can think of your exam corrections as a second draft of your exam performance. Thus, I have much higher expectations for the type of work you submit in this document. With this in mind, I will be looking for you to submit corrections that reflect:
A. A robust concept image associated with each aspect of the solution to each problem including all five elements of
B. Clear, accurate, and well-written solutions
C. Evidence of reflective thought about study skills and your progress through this course. This should include not only an analysis of your mistakes but also specific plans on how to improve your performance from this point forward.

Your final exam 1 grade will reflect your ability to communicate to me that you are addressing each of these items, both in your first-draft grade that you earned during the in-class exam and during the corrections process. The final grade I assign will be based on these items.

## What will I turn in?

Staple or paper clip your exam corrections packet and submit your work in the following format:

| TOP SHEET: | Your hard copy of Exam |
| :--- | :--- |
| SECOND SHEET: | Your Exam Corrections |
| THIRD SHEET: | Your Exam Corrections Form (all 6 pages) |

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1. Take a look at your original graded exam. For each problem, use the table below to identify:
1) How many points you earned and how many points you missed
2) Whether or not you earned full credit

PERFORMANCE OVERVIEW

| ORIGINAL EXAM: <br> To be filled out by student |  |  |  |  |  | EXAM CORRECTIONS: <br> To be completed by instructor |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Exam <br> Problem | Full <br> Credit | NOT Full <br> Credit | Points <br> Possible | Points <br> Earned | Points <br> Missed | Correction <br> Accepted | Correction <br> Rejected |
| 1A |  |  | 6 |  |  |  |  |
| 1B |  |  | 6 |  |  |  |  |
| 2A |  |  | 6 |  |  |  |  |
| 2B |  |  | 6 |  |  |  |  |
| 3 |  |  | 6 |  |  |  |  |
| 4A |  |  | 6 |  |  |  |  |
| 4B |  |  | 6 |  |  |  |  |
| 5 |  |  | 8 |  |  |  |  |
| 6 |  |  | Extra |  |  |  |  |

## EXAM 1 REFLECTSION: SELF ASSESSMENT

2. Prior to taking this exam, what was the percent score you wanted to achieve on your first attempt for this in-class exam? In other words, what was your goal percent score PRIOR to taking the exam?
3. What percent score did you actually achieve?
4. Did you achieve your goal for this particular exam?
$\square$ YES
$\square$ NO
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## EXAM REFLECTION STUDENT ASSESSMENT QUESTIONS:

5. What went well for you in this exam? What did you do well? What study skills seemed to be most helpful?
6. What types of mistakes did you make on this exam? Why do you think you made these mistakes?
7. Based on your performance review and your responses to the questions above, name at least two new strategies you plan to use to prepare for the next in-class, timed exam. Describe these in details and explain why those strategies will help you avoid the types of mistakes you identifies in question 6 above.
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## EXAM REFLECTION INSTRUCTOR ASSESSMENT QUESTIONS:

8. What is challenging about this course? What suggestions do you have for your instructor to help you address your challenges?
9. What are the aspects of this class that you appreciate? What in this class is helping you learn? What suggestions do you have for your instructor for things that he should continue to do in order to help you learn in this class?

## Avoid Common Mistakes on In-Class Exams

In-class exams are performances that depend on time. For each concept or idea that you will be tested on, there are three learning activities that you need to complete:

1. Understand the idea (Create highly valuable lesson notes and address questions that arise)
2. Remember the idea (Use the green-yellow-red daily testing system)
3. Recognize when to apply the idea in practice (Practice problem solving using in-class examples, quizzes, suggested problems, and practice exams with a focus on the reasoning process behind the solution. Specifically, each time you apply a concept from the class, ask yourself: why did I apply that concept in this situation? How would I have known to do this? What trigger might I recognize?)

These three steps are necessary but not sufficient for high performance. In other words, for each concept you will be tested on, if you don't do these steps, you will likely not do well on the exam. However, just because you complete all three of these steps for each idea does not guarantee that you will do well on the exam. This cruel reality results from the fact that to do well on exams, you need to build strong exam skills in addition to strong conceptual understanding of the content on the exam.

As we have discussed before, one of the best ways to improve your test-taking skills is to focus on learning from your mistakes. To learn from your mistakes, you need to be able to do the following three things

- Have the self-confidence and determination to identify and admit that you made a mistake
- Correct your mistakes by finding the proper solution to the problems that you missed
- Be courageous and strategic about making changes in your routines to avoid making these mistakes in the future By completing the exam correction process, you identified your mistakes and wrote the correct answer. You also brainstormed about how you might make changes to your study routines to improve your next exam score.

This document is designed to further inspire enhanced performance in on future exams. We do so by discussing common exam mistakes and making specific suggestions on what you might do to correct each mistake.

## TYPE 1: MISREAD DIRECTIONS ERRORS

These errors occur when you do not fully read the directions or misunderstand the some crucial part of the problem statement but you answer the question or attempt to solve the problem anyway. Examples of errors in this category include:

I didn't read the entire problem.
I didn't pay attention to a key condition in the problem statement.
I didn't address all parts of the problem.
To avoid this type of error, make a pre-commitment to read all the directions carefully before you start the problem. Practice this habit on the nightly homework assignments, daily quizzes and on all sample exams.

## TYPE 2: CARELESS ERRORS

These are errors that you would have caught immediately had you just reviewed your work. Examples of these type of errors include:

I made a silly arithmetic or algebra error.
I knew how to solve this problem, made a mistake in my work and I didn't check my answer.

## TYPE 3: CONCEPT ERRORS

These are mistakes you make because at the time you took the test, you did not fully understand the properties, principles, and techniques required to work through the problem. Examples of these type of errors include:
A. I had a difficult time connecting the ideas I studied to this problem statement.
B. I didn't know a definition, key term of theorem related to this problem.
C. I didn't understand the concept(s) behind this problem well. I didn't fully learn this material.

## TYPE 4: APPLICATION ERRORS

These are mistakes you make because at the time you took the test, you did not fully understand the properties, principles, and techniques required to work through the problem. Examples of these type of errors include:
A. I had a difficult time connecting the ideas I studied to this problem statement.
B. I didn't think of the proper method to solve this problem.

## TYPE 5: TEST PROCEDURE ERRORS

These are mistakes you make due the specific way you take your tests. These include:
A. Missing more questions in the first-third, second-third, of last third of the exam.
B. Not completing a problem through the last step
C. I forgot to finish this problem. I left this problem partially complete.
D. I rushed through this problem and skipped steps.
E. Getting stuck on one problem and spending too much time.
F. Rushing through the easiest part of the test and making careless errors.
G. Miscopying an answer from your scratch work to the test.
H. Leaving blank answers on the exam.
I. Trying to solve all problems on the test in the order they are written (start with the first problem, then move on to problem 2, then go to problem 3, and so on.)
J. Attempting to finish every problem before moving on to the next problem.

## TYPE 6: EMOTIONAL MANAGEMENT ERRORS

These are mistakes you make because you are nervous and didn't deal with your nerves prior to the exam. These include:
A. I became emotionally overwhelmed with the stress of the exam.
B. I had the right answer but second-guessed myself.
C. I wasn't confident in my answer, overthought myself, and changed a correct answer to a wrong one.
D. I ran out of time on this problem.
E. I skipped this problem and forgot to come back at the end of the exam.
F. I panicked and forgot what I know about this problem

## TYPE 6: STUDY ROUTINE ERRORS

These mistakes result from the study habits that you wielded prior to this exam. Perhaps you studied the wrong material or did not spend enough time studying pertinent material.
A. I had a difficult time connecting the ideas I studied to this problem statement.
B. I didn't get enough sleep the night before the exam.
C. I still don't know what I did wrong.
D. I still don't know what the correct solution should be.

Finally, in some situations, you might think you actually deserve full credit on this problem, even though the instructor graded you down for your response. In this case, you'll want to have a rewritten version of your answer with a wellarticulated argument that demonstrates that your written answer is legitimate.

