

Title: Analyzing Exam Errors and Making Corrections

Class: Any Gateway Math Class. (Note: I believe this activity would be most valuable in classes where the tutor is directly connected to the class and teacher. I think this activity would be difficult for a tutor who does not know the teacher/student well.)

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Objective: To encourage a student to look for patterns in their test errors. To foster an awareness of the type of test-taker the student is so that he/she can develop strategies to perform better in the future.

Activity: To carefully analyze, correct, and discuss test errors using a form provided by the teacher.

Instructions to tutor: A student will come to you after attempting to analyze and categorize test errors. He/she will also have attempted to re-work the problems missed on the exam. Your first task is to carefully go through the “corrections.” Don’t be surprised if the student makes mistakes again on the second attempt. Your second task is to go over the categories of errors with the student. It is very common for students to state that most of their errors are “careless.” However, most often there is something deeper occurring to undermine the student, especially if he/she makes another mistake on the second attempt. Overall, your job is to encourage the student to step back from the small details of the exam and look at the “big picture.” You want to ask them “In general, how can you be better prepared for the next exam? What particular steps can you take well before the day of the exam? What can you do during the exam to make it the best and most accurate assessment of your skills and knowledge?” These are big questions, and the student will need your help in finding the answers. Of course, you want to help the student understand the particular information, but you also want to teach them *how to be a better student in general*. Some common advice for the student: Slow down. Read everything. Get a good night’s sleep. Do more homework so that things come more naturally to you on an exam. When doing homework, develop a process that you can rely on during times of stress (such as an exam!), etc.

Keywords/Tags: after math, test corrections, error analysis, test taking.

Aftermath for Exam _____

Student Directions:

Carefully go over Exam #__.

For each problem that you missed, classify the type of error you made (see pg 2) and complete the table below.

Then on a separate sheet of paper, correctly re-work every missed problem.

Make an appointment with a tutor to check that your test corrections are correct.

In the same appointment, discuss the categories of errors.

Submit the completed table and form, the exam, the re-worked problems. Make sure that your tutor signs and completes his/her part of the form to verify that your corrections have been checked and that you have discussed the categories of errors.

| Error Type | Question #s | Total points missed for the type of error |
|-----------------------|--------------------|--|
| 1. Direction Errors | | |
| 2. Careless Errors | | |
| 3. Concept Errors | | |
| 4. Application Errors | | |
| 5. Test-taking Errors | | |
| type a | | |
| type b | | |
| type c | | |
| type d | | |
| type e | | |
| type f | | |
| type g | | |
| 6. Study Errors | | |

Six Types of Test-Taking Errors

| Type | Suggestion |
|---|--|
| 1. Misread direction error These errors occur when you skip directions or misunderstand directions | To avoid this type of error, read <u>all</u> the directions, underlining key words. |
| 2. Careless error Mistakes made which can be caught automatically upon reviewing the test. | To avoid this type of error, watch carefully for simple mistakes as you work each problem. After finishing the exam, if you have time, review each problem step by step, checking that you have not made careless errors. |
| 3. Concept errors Mistakes made when you do not understand the properties or principles required to work the problem. | To avoid this type of error in the future, you must go back to your textbook or notes and learn why you missed the problems |
| 4. Application errors Mistakes that you make when you know the concept but cannot apply it to the problem. | To reduce this type of error, you must learn to predict the type of application problems that will be on the test. |
| 5. Test-taking errors Mistakes that you make because of the specific way you take tests, such as: <ul style="list-style-type: none"> (a) Missing more questions in the 1st or last third of the test. (b) Not completing a problem to its last step. (c) Changing test answers from the correct ones to incorrect ones. (d) Getting stuck on one problem and spending too much time. (e) Rushing through the easiest part of the test and making careless errors. (f) Miscopying an answer from your scratch work to the test. (g) Leaving answers blank. | <p>If you find that you miss more questions in a certain part of the test consistently, use your remaining test time to review that part of the test first.</p> <p>To avoid this mistake, <u>review the last step of a test problem first</u>, before doing an in-depth test review.</p> <p>If you have this tendency, then write on your test “Don’t change answers!” Only change answers if you have double-checked and can prove to yourself that the changed answer is correct.</p> <p>Set a time limit for each problem before moving to the next problem.</p> <p>If you do this often, after finishing the test review the easy problems first, then review the harder problems.</p> <p>To avoid this, systematically compare your last problem step on scratch paper with the answer on the test. Work with your scratch paper placed on top of the test paper, not off to the side.</p> <p>Write down some information or try at least to do the first step.</p> |
| 6. Study errors Mistakes that occur when you study the wrong type of material or do not spend enough time studying pertinent material. | To avoid these errors in the future, take some time to track down why the errors occurred so that you can study more effectively the next time. |

 For tutor use: Please check the appropriate box.

- Student has completed worksheet but may need further assistance. Recommend a follow-up with instructor.
- Student has mastered the material in this exam and understands/recognizes a pattern.

Tutor Name: _____

Tutor Signature: _____