Test 1 Error Analysis Assignment (Optional)

<u>Due Date:</u> Beginning of class on Friday, October 26 (late submissions will not be accepted)
<u>Worth:</u> Up to 5% added to your Term Test 1 mark (the adjusted grade cannot exceed 100%)

<u>Hand in this assignment along with your original term test.</u>

Part 1: Error Analysis

For each problem that you missed on the test (i.e., each problem for which you did not receive full marks), do the following:

1. State the topic being tested (e.g., "solving linear inequalities.")

2. Write out a complete, correct solution.

3. Describe and classify error. You may use the following categories as a guide:

   - Careless error (misread question, didn't follow directions, skipped steps, minor arithmetic errors, copied number down wrong)
   - Form error (missed brackets, improper notation, too messy to read)
   - Concept error (do not understand the properties or principles required to answer the question)
   - Test-taking error (changing answer from correct answer to incorrect answer, keep writing after answered question, spending too much time on one problem, rushing through "easier" questions, leaving answers blank)

4. Discuss ways to avoid making the same mistake in the future. Some examples include:

   - Read entire question thoroughly, underlining or highlighting key words. Re-read question after finishing your answer.
   - Review answers at the end of the test.
   - Check your answers if possible.
   - Close your eyes and breathe deeply during the test.
   - Repeat a positive mantra (in your head) during the test to remain calm and confident.
   - Visit instructor's office hours or check your notes to review a concept you didn't fully understand.
   - If you're stuck during the test, try to re-write information from the test question or at least attempt a first step.

Sample response for Part 1:

Test question: Determine $(-2, 2) \cup [1, 7]$. Express your answer using **interval notation**.

Incorrect solution: $(-2, 2) \cup [1, 7] = \{x \,|\, 1 \leq x < 2\}$

Error analysis:

1. Topic: Sets and interval notation

2. Correct solution: $(-2, 2) \cup [1, 7] = (-2, 7]$

3. In my solution, I made several errors. First of all, I did not express my answer using interval notation (a form error). This is partly because I don't completely understand interval notation, and I also need to review the names of the different types of set notation. Also, I determined the intersection of $(-2, 2)$ instead of the union. This was a careless error. If I had taken my time, I would have realized that the $\cup$ symbol was asking for the union.

4. I am going to redo the homework for section 0.2 and test myself on similar questions. I will make sure to draw a number line for these types of questions in the future. On the next test, as soon as I start writing, I am going to write $\cup$ = union = OR and $\cap$ = intersection = AND as a reminder.

Part 2: Analysis of Learning Strategies

Answer the following questions:

1. Do you want to do better on Term Test 2 than you did on Term Test 1?

2. If yes, what will you do differently to make that happen? Be specific in your response.

To answer these questions, consider:

- How often do you attend class?
- How much time have you been spending on homework?
- How many extra homework problems do you do?
- Do you make study notes?
- How often do you visit the Math Assistance Centre?
- How often do you visit the instructor's office hours?
- What do you do when you are stuck on a problem?
- Have you made a free consultation appointment with a learning strategist?
- Have you made a free consultation appointment with a time management coach?
- Have you made a free consultation appointment with the Math Assistance Centre staff?
- Have you visited a counsellor at the Wellness Centre to discuss anxiety and stress levels?