Point Rebate Information
Math 161,
Fall 2007
R. Koehler

Be sure to follow all these directions:

- ***Come in to office hours or tutoring time if your score is less than 80/100 or 24/30.***
- ***Write on one side of each page, only.***
- ***Do not use both sides of any sheet!!!!! I will not give any credit for anything written on the back of any rebate page.***
- ***Include your test paper. Staple your test paper and rebate pages together, with the test on the top, and rebate pages in order underneath.***

Basic Requirements
You may earn back up to 50% of the points that you miss on any test or quiz, except for the final examination. For example, if you score 18 out of 30 on a quiz, you missed 12 points. Therefore, if you turn in point rebates that is wholly acceptable, you may earn back 50% of 12 points = 6 points, making your quiz grade 18 + 6 = 24 out of 30. Your rebate may be worth less than the 50%. This score is largely subjective.

Point rebates are due at the beginning of the class after the quiz/test is returned to the class. If you are absent when papers are returned, it is your responsibility to get your paper from me, either in class or during office hours. For privacy reasons, I cannot give papers to a classmate. No late point rebates will be accepted. Rebates may be done on quizzes and tests, only. There is no point rebate on the final exam.

Neatness counts! Your rebate must be neat and legible. Remember, the amount of your rebate is largely a subjective rating of how well you have convinced me that you now know the concept.

What I am looking for when I read your point rebate
As you do your point rebate, keep in mind that the underlying goal of your point rebate must be to convince me that you now know how to do the problem, and it is highly unlikely that you will make the same or a similar mistake again.

What you must do

If your test/quiz score is less than 80/100 or 24/30, you must **come in during office hours or to the tutoring center in South Wing 104 for help (before or after you have worked on your rebate) in clearing up your difficulty.** Mr. K. or the Teaching Assistant will sign your test paper signifying that you have come in. You must come in and see one of us to be eligible to receive the rebate.

In any case, you must include the following in your point rebate : You do not need to copy the question - just be sure to include you test paper.

1. If the answer is numerical/algebraic, or involves work to find the answer, you must **show a complete, correct solution to the problem** with all steps shown, regardless of the error you made. If the answer is non-numeric in nature, the correct answer must be stated.
2. **A brief statement of the correct procedure, each concept, and/or each definition involved** in finding the answer
3. **Your wrong answer, and a statement of what you did incorrectly.**
   If #1 above is not done or is incorrect, no points may be gained back.
   If you believe your original answer may actually be a correct one, and does not agree with mine, give a full justification for your answer, instead of the statement of what you did incorrectly.

See the examples on the next page.

Example 1: (Problem: Find the mean of the data 50, 70, 90.)

You do NOT have to copy the entire statement of the problem

Your work – what you show on your rebate page:

1. 50 + 70 + 90 = 210
   210 / 3 = 70 ANS
2. The mean or average of a set of data is the sum of the data values, divided by the number of data items.
3. I got the answer of 150. Instead of adding the three numbers and then dividing by 3, I entered into the calculator: 50 + 70 + 90/3. When I entered this, I got 150, because only the 90 was divided by 3 I should have put parentheses around the three data numbers: (50 + 70 + 90)/3 This forces the three numbers to be added first, and then divided by 3, and gives the correct answer of 70.

Example 2: (Problem: Solve for x: $x^2 - 3x = 10$ **)**
Do NOT copy the entire statement of the problem

Your work – what you show on your rebate page:

$$x^2 - 3x - 10 = 0$$
$$(x-5)(x+2) = 0$$

1. $x - 5 = 0 \ \ or \ \ x + 2 = 0$
   $x = 5 \ \ or \ \ x = -2$

2. When solving by factoring, bring all terms to one side of the equation, then factor, set each factor equal to zero, and solve the resulting equations.

3. I forgot to bring all terms to one side. I just factored the left side, getting x (x – 3), and then set each factor equal to zero and solved.

Example 3: Problem: (Find the derivative of $f(x) = 3x^4 - 2x^3 + x - 5$)
Do NOT copy the entire statement of the problem

Your work – what you show on your rebate page:

1. $f'(x) = 4(3)x^{4-1} - 3(2)x^{3-1} + 1x^{1-1} - 0 = 12x^3 - 6x^2 + 1$
2. Differentiate term-by-term. When finding the derivative of a single algebraic term, use the Power Law: multiply the coefficient of the term by the exponent on x; then lower the exponent by one. To find the derivative of a polynomial, differentiate each term separately. The derivative of a term of degree 1 is the coefficient, and the derivative of a constant is 0.
3. My answer was $12x^3 - 6x^2 + 1 - 5$. I forgot that the derivative of the constant, 5, should be zero. I just copied the 5 into the derivative. I should have ignored it.