

CLS Homework #9 Notes and Common Errors

Homework Due: 5 April 201988

Problems Graded: 4.5.1abdhj, 5.1.1aehjm, 5.1.9

- General Notes -

1. I don't really have a lot of general notes for this homework. If you have questions on how to do certain problems, remember that there will be a review session on Monday, April 8th at 6:00pm in MATH 350. Also, I will have my office and my Marc hours Tuesday before the exam.

- Problem 4.5.1 -

1. The only note that I have for this one is that some of you copied down problem (c) instead of problem (d) when doing the homework

- Problem 5.1.1 -

1. Just keep in mind that if we ask you to take an antiderivative and you are not sure that your answer is correct, you can check it by taking the derivative and seeing if you get your original equation back.

- Problem 5.1.9 -

1. In part (a), all you were supposed to do was check that the derivative of $x \ln(x)$ was $1 + \ln(x)$.
2. There were a lot of people that correctly concluded

$$\int \ln(x) dx = x \ln(x) - x + C,$$

but that did not provide any sort of justification for this answer. In this case, justification could have either been an explanation about how you arrived at $x \ln(x) - x + C$, or a quick check to see if when you took the derivative of $x \ln(x) - x + C$, you got $\ln(x)$. Keep this in mind for the test coming up this week.