Reading Assignment for Section 4.8

MATH 130: Calculus I, Sections 2 and 3
Fall Semester 2013

Follow the general guidelines for the Reading Assignment (the salmon colored handout). Be sure to include and label all four standard parts a,b,c,d of the Reading Assignment in what you hand in. Be sure to **staple** together pages if you have more than one, and include your **name** and which **section** of calculus you are in at the top of the page. Neatness is appreciated!!!

Due: at the beginning of class on Monday, November 25th

Read:

Section 4.8, pages 292-301: Antiderivatives!

Notes: Guess what? This is your LAST reading assignment of the semester! Remember that in mathematics we want a way to undo everything we do, like to undo addition we subtract, and so on. We have spent a lot of time taking derivatives now, but what if we are given the derivative and we want the original function? We need to find the antiderivative. This section is an introduction to finding antiderivatives. Find it interesting? Take Calculus II to learn more!!!

Remember that your answers should include complete sentences for every question.

Reading Questions for part (a):

1. Why do functions have more than one antiderivative? How many antiderivatives does one function actually have?

2. Find three antiderivatives of $f(x) = \sin x$. Explain briefly why you know they are antiderivatives/how you got them.

Remember parts b-d on the salmon handout!