

# Reading Assignment for Section 1.4

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 each assignment, and include your name and which section of calculus you are in at the top.

**Due:** at the beginning of class on Monday, September 2nd

Read:

Section 1.4, pages 34-43

Reading Questions for part (a):

1. Are sine and cosine even or odd functions? How do you know this? Can you explain why in more than one way?
2. Are any of the trigonometric functions one-to-one? Your answer to this should make you wonder why we can talk about inverse trigonometric functions. Why does it make you wonder? Why can we talk about inverse trigonometric functions.
3. What is the domain of the secant function? Explain carefully how you could determine this. What is the range of the secant function? Explain.
4. What is the domain and range of the inverse secant function? Why?
5. Note that we can write  $\arcsin x$  instead of  $\sin^{-1} x$ , i.e. they are different notations for the same function. Why might we want to use the first way of writing this?

Remember parts b-d on the salmon handout!