21C Homework 1

Due Friday April 8

Steinellos \equiv "Calculus and Analytic Geometry", 5th Edition, S.K. Stein and A. Barcellos

Question 1 Steinellos, §14.1, p784, qq 2,10,16,24,28,35

Question 2 Steinellos, §14.2, pp794-5, qq 2,8,12,16,20,24,26,38

Question 3 Next week we will introduce the precise mathematical definition of continuity for functions of many variables. Using Steinellos §2.10, explain how to define $\lim_{x\to a} f(x) = L$. Answers exceeding 1 page in length will not be graded!

Question 4 What happens if you cut a Möbius strip along its middle (try it!) What if you cut staying exactly 1/3 of the way across?