

Main Exercises Week 4

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

Follow the general guidelines for the Main Exercises assignments (the salmon colored hand-out). Be sure to **staple** together each assignment, and include your **name** and which **section** of calculus you are in at the top. Neatness is appreciated and makes a good first impression!!! Remember that your write up should be your own.

Due: at the beginning of class on Friday, September 20th

1. What is the value of $\lim_{x \rightarrow 4} \left(7 - \frac{x}{4}\right)$? Use the ϵ - δ definition of a limit to prove your assertion. (Refer to the outline on the handout from lab on September 12th. Remember that words are important!)
2. Evaluate the following limit, if it exists. If the limit does not exist, explain why. This should be written carefully!

$$\lim_{t \rightarrow 17} \frac{6 - \sqrt{t + 19}}{t - 17}$$