Main Exercises Week 7

MATH 130: Calculus I, Section 2 Your Name (Print): _____

Follow the general guidelines for the Main Exercises assignments (the salmon colored handout). Be sure to **staple** together your pages if you have more than one, and include your **name** at the top. Neatness is appreciated, makes a good first impression, and can earn you a bonus point!!! In order to earn the bonus point, you MUST have good limit grammar (limit signs and equal signs!)!

Due: Monday, March 4, 2019 at 12:20pm

Remember: Your write-up should be **your own**. You may discuss these problems with others, but **you should be alone when you write them up**, using only outlines of any group or Intern discussions. EXPLAIN and SHOW YOUR WORK!!! Final answers will not receive full credit without supportive explanations. You may use your own paper on which to write these up.

1. Determine the interval(s) on which the function $f(x) = \ln(x^2 - 9)$ is continuous. Justify your answer with full sentences like we did with our example in Wednesday's class, referring to Theorems where appropriate. Remember to check the finite endpoints of any interval to see if f is continuous from the left or right there. Justify any claims.

This Main Exercises has only one problem! Work hard to make sure that your form (HOW you justify your conclusions) is as precise as possible. Feel free to show me a rough draft first. Make sure you DO a rough draft before you write out your final version. Think of this as an essay on continuity!