Math 2573H   **Honors Calculus III**   **Fall Semester 2020**

Assignment 6 - Due Thursday 10/22/2018

Exercises from Colley:
3.1: 4, 10, 18, 32
3.3: 2, 8, 18, 20, 24, 26
3.4: 2, 5, 8, 10, 14, 15, 20, 24

Upload to Gradescope only the following 9 questions:
3.1: 10, 18
3.3: 18, 20, 24
3.4: 10, 15, 20, 24

Notes:
No, that isn't a misprint: section 3.2 is not listed in the exercises, and neither is 2.7 for that matter.

Section 2.7 is marked 'optional' and it is about Newton's method, which is a very important method for solving systems of equations when there are several variables, but it is not something which is used in the rest of the theory behind multivariable calculus. It is hard to do the calculations it requires without a computer, but once a computer is available the method comes into its own. Because of this it is difficult to set exam questions on Newton's method. I may summarize it.

Section 3.2 is about properties of curves, such as how to compute their length, and things to do with their curvature. Again, they are not needed in the theory behind the rest of what we will do. I may come back to some of this at the end if there is time.