

MA 262 Vector Calculus Spring 2021

HW 2b Integration and Curves Due: Fri. 2/17

This is the second part part of HW #2. You should turn your solutions to both parts in together as one assignment. It was split into two parts only because of the logistics surrounding my travel.

These problems are based on your in class work and Chapter 5 and Sections 3.1 and 3.2 of the textbook (which you should read). Some of them may look forward to topics we will cover in the future. You should use what you know, think creatively, and not necessarily expect the problems to exactly mimic examples from class or the book. It's your opportunity to practice genuine mathematical thinking!

Please review the course homework policies and don't forget a cover sheet! Whenever you use a computer to calculate or plot you need to say what program/software you are using to do the plot. Ideally you will also include all or part of the code you used.

(CR) means the problems are graded on a credit/no credit basis. You are encouraged to check your answers in the back of the book, if possible.

- (1) (CR) From Colley Section 5.2, do Exercises 11, 17, 27. (You may use technology to do the actual computation. Be sure to carefully explain your set up)
- (2) (CR) From Colley Section 5.3, do Exercises 1, 13
- (3) (CR) From Colley Section 3.1: Problems 9, 25, 26.