

VECTOR CALCULUS SUMMER ASSIGNMENT

Summer Assignment includes Ch9.1-7: You may self enroll in my canvas course with the following enroll code YG3NTN (<https://apsva.instructure.com/enroll/YG3NTN>) or by emailing me susan.carr@apsva.us

1. **Read Multivariable Calculus** textbook Ch 9 PDF in Ch9 Module.
2. **View the Ch9 Videos for 9.1-9.7**
2. Completing the Bookwork for each section 9.1-9.7.
3. Completing Chapter 9 Homework Problem Sets #1-5

Introduction: Welcome to Vector Calculus! Below are the directions for the summer assignment. The purpose of this assignment is to get us off to a strong start by covering the first chapter of the MVC book. This will ensure that we have sufficient time to cover all of the material in the course before the end of the first semester. This is a semester course and it will be very difficult to complete the entire course if we save Chapter 9 until September. The first chapter is mostly a review of concepts you have learned in previous IB math courses – vectors, etc. – but you will need to focus on learning these at a deeper level. Please read these directions carefully and contact me by email at susan.carr@apsva.us if you have any questions about the assignment or require clarification about my expectations of the work that you do.

Resources/supplies: Our textbook is *Multivariable Calculus: Concepts and Contexts* by James Stewart (4e)

Summer Assignment:

1. **Read Chapter 9 and view the posted videos for 9.1-9.7**
2. **Complete the Chapter 9 Bookwork Homework.**
 - Once you submit your work, the answer key will appear for you to check your work. All work **MUST** be shown completely (**in your own words**) for these problems:
 - 9.1 HW: p. 638 #s 3, 5, 8, 11, 31, 35, 39
 - 9.2 HW: p. 646 #s 1, 5, 9, 17, 21, 23, 28, 38
 - 9.3 HW: p. 653 #s 1, 9, 12, 17, 22, 25, 40, 50
 - For more practice do: #s 2, 5, 8, 14, 21, 24, 31, 38, 43
 - 9.4 HW: p. 661 #s 1, 5, 11, 17, 25, 26, 27, 29, 33, 39
 - 9.5 HW: p. 670 #s 1, 3, 7, 12, 16, 21, 27, 37, 43, 56, 58
 - 9.6 HW: p. 680 #s 1, 2, 5, 15, 17, 23
 - 9.7 HW: p. 686 #s 1, 2, 4, 6, 8, 13, 21, 29
 - For more practice try: #s 3, 10, 11, 16, 18, 19, 24, 26
3. **Posted Problem Sets #1-5 for write up and turn in by the end of the second week of school (whenever school starts back up again). You will be typing up these problem sets using LaTeX or Word or another equation editor of your choice and posting your answers, then checking with a key.**

Caution about Academic Integrity: DO NOT copy the answers to any assignment from sources you find on the Internet, the textbook solutions handout, or my posted answers. Doing so will be considered plagiarism and consequences of such behavior will result in zeroes. The answers are meant to check your understanding after you have completed a problem and assist you in making necessary corrections. The textbook gives answers to the odds but you need to show all work done to derive the answer; and answers must be in your own words! Caution! Answers you find on the Internet are sometimes incorrect and will often be stated using terminology and techniques that are not specific to our text. Plus, this will make it easy for me to identify work that is not your own.

Due Date and Grading of Summer Assignment: Summer assignments must be completed by the end of the second week of school! I will not accept any late summer assignments so do not wait for the last minute to work on these. Each student will read and learn at a different pace.

- **Homework and classwork are 10% of your grade.** The Chapter 9 Homework Problem Set will count as 7 homework assignments.
- **Tests are 70% of your grade.** We will review Ch9 before your **Chapter 9 Test** in September 2020. We will likely complete 3 chapters in the 1st quarter so the Chapter 9 Test will count for about 23% of your first quarter grade. I do NOT offer make up tests.

Again, if you have any questions, email me, or find the open summer canvas course to send me an email or find other resources to help you.

Enjoy Your Summer!
Mrs Carr

Resources:

[The Textbook Ch 9](#)

[Video for 9.1](#)

[Video for 9.2a](#)

[Video for 9.2b](#)

[Video for 9.3](#)

[Video for 9.4](#)

[Video for 9.5a](#)

[Video for 9.5b](#)

[Video for 9.6a](#)

[Video for 9.6b](#)

[Video for 9.7a](#)

[Video for 9.7b](#)

[Problem Set 1](#)

[Problem Set 2](#)

[Problem Set 3](#)

[Problem Set 4](#)

[Problem Set 5](#)

This course has enabled open enrollment. Students can self-enroll in the course once you share with them this URL:

<https://apsva.instructure.com/enroll/YG3NTN>. Alternatively, they can sign up at

<https://apsva.instructure.com/register> and use the following join code: **YG3NTN**