PHYS:4761 Homework #2

Reading: Read Arfken, Weber, & Harris, Chapter 2 (p.83–121)

Due at 5:00pm, Friday, September 11, 2020.

Homework Problems:

1. (10 pts) Chapter 1, Exercise 1.10.3

2. (10 pts) Chapter 1, Exercise 1.10.4

3. (10 pts) Chapter 1, Exercise 1.10.5

4. (10 pts) Chapter 1, Exercise 1.10.9

5. (10 pts) Chapter 1, Exercise 1.10.11

6. (10 pts) Chapter 1, Exercise 1.11.4

7. (5 pts) Chapter 1, Exercise 1.11.7

8. (10 pts) Chapter 2, Exercise 2.1.1

9. (5 pts) Chapter 2, Exercise 2.1.2

10. (10 pts) Chapter 2, Exercise 2.1.9

11. (10 pts) HW2 Problem 11: Use Gauss Elimination to (a) express the equations in triangular form and (b) solve for the value of the determinant for the following set of equations:

$$8x_1 + 3x_2 - 4x_3 = 6$$

$$2x_1 - 6x_2 + x_3 = 3$$
$$4x_1 - 3x_2 + 5x_3 = 10$$