

# PHYS:4761 Homework #5

Reading: Read Arfken, Weber, & Harris, Chapter 4, Sections 4.4–4.7 (p.227–248)

Due at the beginning of class, Thursday, October 1, 2015.

Homework Problems:

1. Chapter 3, Exercise 3.10.4
2. Chapter 3, Exercise 3.10.12
3. Chapter 3, Exercise 3.10.14
4. Chapter 3, Exercise 3.10.26
5. Chapter 3, Exercise 3.10.28
6. Chapter 3, Exercise 3.10.35
7. Chapter 4, Exercise 4.1.10
8. Chapter 4, Exercise 4.2.3
9. Chapter 4, Exercise 4.3.5
10. Chapter 4, Exercise 4.4.3
11. Chapter 4, Exercise 4.6.3
12. Chapter 4, Exercise 4.7.1  
HINT: Let  $dx = a_1du + a_2dv + a_3dw$ ,  $dy = b_1du + b_2dv + b_3dw$ , etc.