

PHYS:4762 Homework #5

Reading: Read Arfken, Weber, & Harris, Chapter 14, Sections 14.2-14.6 (p.661–695)

Due at the beginning of class, Thursday, February 22, 2018.

Homework Problems:

1. (10 pts) Chapter 14, Exercise 14.1.21
2. (10 pts) Chapter 14, Exercise 14.1.25
3. (10 pts) Chapter 14, Exercise 14.2.5
HINT: You may wish to use the result of Exercise 14.2.2
4. (10 pts) Chapter 14, Exercise 14.3.3
5. (10 pts) Chapter 14, Exercise 14.3.5
6. (10 pts) Chapter 14, Exercise 14.4.7
7. (10 pts) Chapter 14, Exercise 14.5.5
NOTE: There is a typo in the solution in the text to part (b). The variable l in the denominator and integral limit should be replaced by h .
8. (10 pts) Chapter 14, Exercise 14.5.6
9. (10 pts) Chapter 14, Exercise 14.6.1
10. (10 pts) Chapter 14, Exercise 14.6.9