

Math 23 - Fall 2013
Homework 7
Due Wednesday, 6 Nov. 2013.

Note:

- Except for problems that are stated explicitly, all problems are from Boyce and DiPrima 9th Edition.
- Please show all of your work (writing a list of answers is not sufficient).
- Please indicate the people you worked with.
- Please staple your page together.
- 10 problems will be graded (2 points each).
- Hand in a separate write-up for each part.

- **Part A**

1. Section 7.8: #1(c), #2(c)
2. Section 7.9: #4

- **Part B**

1. Section 10.1: #1, #3, #5, #7, #9

- **Part C**

1. Evaluate integrals

$$\int_{-\pi}^{\pi} \cos 2x \cos 5x \, dx \tag{1}$$

$$\int_{-\pi}^{\pi} \sin 5x \sin 10x \, dx \tag{2}$$

$$\int_{-\pi}^{\pi} \cos x \sin 3x \, dx \tag{3}$$

$$\int_{-\pi}^{\pi} \cos 2x \cos 2x \, dx \tag{4}$$

$$\int_{-\pi}^{\pi} \sin 5x \sin 5x \, dx \tag{5}$$