Math 241 Homework#9
due 11/14 Thursday in class

Heat equation

Read *A*pplied PDE by Haberman (5th edition) Chapter 7, 7.7-7.9.

1. *A*pplied PDE by Haberman, chapter 7.7, exercise 7.7.1.

2. *A*pplied PDE by Haberman, chapter 7.7, exercise 7.7.2 a). (Hint: you can denote by z'_{nm} the zeros of $\frac{d}{dz}J_n(z)$.)

   Here is a table of the zeros http://mathworld.wolfram.com/BesselFunctionZeros.html.

3. *A*pplied PDE by Haberman, chapter 7.7, exercise 7.7.6.

4. *A*pplied PDE by Haberman, chapter 7.7, exercise 7.7.10.

5. *A*pplied PDE by Haberman, chapter 7.9, exercise 7.9.2 c).

6. *A*pplied PDE by Haberman, chapter 7.9, exercise 7.9.3 c).

7. *A*pplied PDE by Haberman, chapter 7.9, exercise 7.9.6.