PARTIAL DIFFERENTIAL EQUATIONS   ASSIGNMENT 6.2
SPRING 2017   DUE FEBRUARY 23

Exercise 1. Use Maple to produce animations of the solutions to exercises 3.3.8 and 3.3.9. Each animation should be physically meaningful, i.e. should only include x-values along the length of the string, should include enough terms in each partial sum to accurately reflect the shape of the string, and should show at least periods of motion of the string.

Exercise 2. Use Maple to produce an animation of the solution to exercise 3.5.14. Your animation should be physically meaningful, i.e. should only include x-values along the length of the rod, and should make the evolution of the solution toward the steady state clear.

Exercise 3. Solve exercises 3.6.3 and 3.6.4, and animate their solutions using Maple, according to the guidelines of the preceding exercise.

Exercise 4. Derive the series expression for $u(x, t)$ given in exercise 3.6.5.