## Math 319 - Differential Equations II Pre-Reading Assignment # 11 due 10am Tue Oct 21st, via email

Reading Section 10.6, pages 611-613

Questions Answer the questions below to the best of your ability.

- 1. Consider equation (5). Compare it with equation (4) in section 10.5 (page 599). What are the similarities? What are the differences?
- 2. Do steps 1-2 of the separation of variables solution method (that is, apply separation of variables to the PDE and separable BCs, and determine the ODE problems that result) for equations (1)-(2) in section 10.6 (p 611) and for equations (1)-(2) in section 10.5 (p 599). Look at the ODE problems you end up with in each case. Use these to explain the similarities and differences that you observed in problem 1
- 3. Why are drums not used for melody?