

Math 307 - Homework 7 - Dr. Loveless

The problems refer to the 10th edition of the book. Hand in your work in the order it is assigned (Staple all your work together before coming to class). This is a minimal list of problems, I strongly encourage you to do more problems than are assigned.

1. 6.2/22, 23, 24, 25
2. 6.3/1, 2, 4, 7, 11, 13, 15, 18, 19, 20, 22, 24
3. 6.4/1, 2, 5, 11

NOTES AND SPECIAL INSTRUCTIONS :

- Problems 6.2/24, 25: You are just setting up the problem, you aren't solving. That is take the Laplace transform of both sides, solve for $\mathcal{L}\{y\}$ and stop.
- Problems 6.3/1, 2, 4, 7, 11: These should be quick exercises where you will get practice working with the unit step function. If you have trouble with these try more of the problems from 6.3/1-12.
- Problems 6.3/13, 15, 18: You don't need to do any integration here. Rewrite the given function in terms of step functions, then use the full table of Laplace transforms. If you have trouble with these try more of the problems from 6.3/13-18.
- Problems 6.3/19, 20, 22, 24: Separate and do partial fractions, then use the full table of Laplace transforms. If you have trouble with these try more of the problems 19-24.