## Homework Assignment 13 in Differential Equations, MATH308-SUMMER 2012

This assignment is not for the submission, but it is recommended to solve the problems below as a part of preparation to the exam 2

 $\frac{\text{Topics covered}: initial value problems with discontinuous and impulse forcing functions (corresponds to sections 6.4 and 6.5 in the textbook)$ 

1. Find the inverse Laplace transform of the function  $\frac{e^{-5s}(3s+2)}{(s-2)(s^2-4s+8)}$ .

2. Solve Problem 9 (a) of section 6.4, page 336 of the textbook.

3. Solve Problem 3 (a) from section 6.5, page 343 of the textbook.