Find the Laplace transform of .



Find the Laplace transform of .



Find the Laplace transform of .



Find the Laplace transform of 



Find the Laplace transform of 



Find the inverse Laplace transform of



.

Find the inverse Laplace transform of





Find the inverse Laplace transform of





Consider the following initial value problem:



Using for the Laplace transform of , i.e., , find the equation you get by taking the Laplace transform of the differential equation and solve for



Find the Laplace transform of





Find the Laplace transform of





Find the inverse Laplace transform of





Find the Laplace transform of



.

Take the Laplace transform of the following initial value problem and solve for :



.

Now find the inverse transform to find 

Find the Laplace transform of





Find the convolution of and 

    



Let denote the Laplace transform of . Find .



Now find the inverse Laplace transform to obtain 



*NOTE:* Your answer will require the unit [step](http://webwork.math.ttu.edu/webwork2/s113mtodam3350sD01/HW6/18/?effectiveUser=moshahid&displayMode=images&showOldAnswers=1&user=moshahid&key=chV6GnJkoizIcJjSxoQacVHVsGvt8s7Q) function     which in

Evaluate the integral (here is the Dirac delta function)



  ANS:   

Find the Laplace transform of the given function 

