
Math 221 Quiz 11

Name: _____

Score: _____

Instructions: You must show supporting work to receive full and partial credits. No text book, notes, formula sheets allowed.

1(3pts) Use partial fraction and complete squaring to find $\mathcal{L}^{-1}\left\{\frac{5-2s}{s^2+7s+10}\right\}$.

2(3pts) Use the convolution formula to find $\mathcal{L}^{-1}\left\{\frac{1}{s^2}\right\}$. No credit for using the formula $\mathcal{L}\{t^n\} = \frac{n!}{s^{n+1}}$.

3(4pts) Use Laplace transform method to find the solution to the initial value problem $x' + 2x = 8e^{2t}$, $x(0) = 2$. No credit for any other method.