Quiz 6 Show your work
April 29 2016

[20] 1.) Given that $\mathcal{L}(e^{at}sin(bt) = \frac{b}{(s-a)^2+b^2}$, find $\mathcal{L}^{-1}\left(\frac{2}{s^2+10s+34}\right)$

$\mathcal{L}^{-1}\left(\frac{2}{s^2+10s+34}\right) =$ _____

2.) Solve $\mathbf{x}' = \begin{pmatrix} 2 & 0 \\ 4 & 5 \end{pmatrix}\mathbf{x}$

$\mathbf{x} =$ _____