

MTH 3311 Practice Test #4

SPRING 2001

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Name _____

Practice Test #4

Instructions. Use Laplace Transforms to solve the Initial Value Problems below:

1. $y'' + 4y = 4 \cos(2t)$; $y(0) = 0$; $y'(0) = 6$

2. $y'' + 3y' + 2y = 0$; $y(0) = 1$; $y'(0) = 1$

3. $y''' - 27y = 0$; $y(0) = -1$; $y'(0) = 6$; $y''(0) = 18$

4. $y'' - 3y' + 2y = 24 \cosh(t)$; $y(0) = 6$; $y'(0) = -3$ (Note: $\cosh(t) = \frac{e^t + e^{-t}}{2}$)