

**Quiz No: 3**

**Math 202**

Q1. Verify that  $e^{-3x}, e^{-4x}$  form a fundamental set of solutions of the differential equation  $y'' + 7y' + 12y = 0$  on the interval  $(-\infty, \infty)$ .

Q2. Verify that  $y_p = \frac{1}{3}e^{5x}$  is a particular solution of the differential equation  $y'' + y' - 6y = 8e^{5x}$

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