

<u>Name:</u>	<u>ID:</u>	<u>serial:</u>
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MATH-202

Term-072

QUIZ-3

Form(B)

Q1: True or False

1) The functions $f_1(x) = x^2 - x$, $f_2(x) = 2x^2 - 3x$ are linearly independent ()

2) The functions $f_1(x) = e^{3x}$, $f_2(x) = e^{-3x}$ form a fundamental set of solutions for the DE $y''' - 9y' = 0$ ()

3) If $W(y_1, y_2, y_3) = x$ then y_1, y_2, y_3 are linearly dependent on the interval $I = (-2, 2)$. ()

Q2) Solve $y''' - 4y' = 0$

Q2) Solve $xy'' - y' = 0$ given that $y_1 = x^2$ is a particular solution.