

King Fahd University of Petroleum and Minerals
Department of Mathematics and Statistics
Math 202-16 Quiz #3

Name:.....ID:.....

Exercise: Consider the differential equation

$$x^2y'' + xy' - 4y = 0$$

(i) Show that $y_1 = x^{-2}$ is solution of the DE

(ii) Use the reduction of order formula to find a second solution y_2 to the DE, linearly independent from y_1 .