King Fahd University of Petroleum and Minerals
Math. & Stat. Departement
QUIZ # 4

Name	ID	SEC 15	Sr#

Q1) (5 pts) Find the derivative of the function $f(x) = [x + (x + sin^2 x)^3]^4$.

Q2)(5 pts) For what values of m does the function $y = e^{mx}$ satisfy the differential equation $\frac{d^2y}{dx^2} - 4\,\frac{dy}{dx} + y = 0$.

Q3) (5 pts) Find $\frac{d^2y}{dx^2}$ if $x^3 - y^3 = 7$.

Q4) (5 pts) Find the derivative of the function $y = \cos^{-1}(\sin^{-1}(2t))$.