

King Fahd University of Petroleum & Minerals
Department of Mathematics and Statistics
(Semester 181) Math 101 Quiz # 6

Name: _____ I.D. # _____ Sr. # _____

1. Find the point on the curve $y = \sqrt{x}$ that is closest to the point $(3,0)$.
2. Use Newton's method to approximate the root of $3x^4 - 8x^3 + 2 = 0$ (using $x_1 = 1$, calculate only x_2).
3. Given $f''(x) = \cos x + \sin x$, $f(0) = 3$, $f'(0) = 4$, find $f(x)$.