

King Fahd University of Petroleum and Minerals
Department of Mathematics and Statistics
Math 101 (121) - Quiz 6

Name:

ID:

Serial No.:

1. Newton's Method is used to find a root of the equation $x^3 + 2x - 4 = 0$. If the first approximation is $x_1 = 1$, then find the second approximation x_2

2. If $f'(x) = \frac{2x^4 - 3\sqrt{x}}{x}$ and $f(1) = \frac{1}{2}$ then find $f(x)$

3. The product of two positive real numbers is 4. If the sum of the square of one of the numbers and the square of twice of the other number is minimum, then find these two numbers.