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

Name:

ID:

Serial No.:

1. If $x_1 = 2$ is an approximation to one of the real roots of the equation $x^3 + 2x - 13 = 0$, then the next approximation x_2 given by Newton's Method is?

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

3. The product of two positive real numbers is 4. If then 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.