King Fahd University of Petroleum and Minerals
Department of Mathematics and Statistics
Math 101 (172) Sec 10 - Quiz 2

Name: ID: Serial No.:

1. The position of a particle is given by the equation

   $$s(t) = 2t^3 - 9t^2 + 12t$$

   where t is measured in seconds and S in meters. Find the total distance traveled by the particle during the first 4 seconds.

2. For $y(x) = \dfrac{(x+1)(x+6)(x+8)e^{x^2}}{\sqrt[3]{x+2}}$, find $y'(0)$

3. Find $(f^{-1})'(1)$, given $f(x) = x^3 + e^x$

4. $\lim_{x \to -1} \dfrac{\sin(x+1)}{x^2 + 3x + 2} =$