

King Fahd University of Petroleum and Minerals
Department of Mathematics and Statistics
Math 101 (172) Sec 08 - 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 3 seconds.

2. For $y(x) = \frac{(x+1)(x+4)(x+8)e^{x^2}}{\sqrt{x+2}}$, find $y'(0)$

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

4. $\lim_{x \rightarrow 1} \frac{\sin(x - 1)}{x^2 + x - 2}$