King Fahd University of Petroleum and Minerals Department of Mathematics and Statistics

| | Math 101 (Term 173) – Quiz 4 |
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| Student Name_ | Student ID: |

Exercise 1 [3 points]

If the position of a particle is given by the equation $s(t) = 4t^3 - 18t^2 + 24t$, where t is measured in seconds and S in meters, find the total distance traveled by the particle during the time interval [0,2].

Exercise 2 [3 points] If $g(x) + x \cos g(x) = x^2$; find g'(0).

Exercise 3 [4 points] If $y = x^{sinx}$; find $y'(\pi)$.