

King Fahd University of Petroleum & Minerals
Department of Mathematical Sciences

Math 101 - 7
Dr. Jawad Y. Abuhlail

Quiz # 3

Semester 031

Name:

ID #:

Section #:

Using Definition discuss the differentiability of

$$f(x) = \begin{cases} x^2 \sin(\frac{1}{x}), & x \neq 0 \\ 0, & x = 0 \end{cases}$$

at $x = 0$.