

King Fahd University of Petroleum & Minerals
Department of Mathematical Sciences

Math 101 - 2
Dr. Jawad Y. Abuhlail

Quiz # 2

Semester 031

Name:

ID #:

Section #:

Let

$$f(x) = x^2 - 2x - 6.$$

1. Find the average rate of change of $f(x)$ on $[1, 4]$. **(4 Pts.)**
2. Find the instantaneous rate of change of $f(x)$ at $x_0 = 1$. **(8 Pts.)**
3. Find the instantaneous rate of change of $f(x)$ at arbitrary x_0 . **(8 Pts.)**