

King Fahd University of Petroleum & Minerals
Department of Mathematics and Statistics
(Semester 121) Math 101 Quiz # 1

Name: _____ I.D. # _____ Sr. # _____

1. Given the function $f(x) = x^2 - 4x$,
 - (a) Find the average rate of change of the function over $[1, 3]$.
 - (b) Find the slope of the curve at $x = 1$.
 - (c) Find the equation of the tangent line at $x = 1$.
2. Evaluate $\lim_{x \rightarrow -2} \frac{x+2}{\sqrt{x^2+5}-3}$ if it exists.