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

Term 172 Quiz#3 (2.6 & 2.7) Math 101 (19)

Full Name: ID# Ser#

Q1. Let $f(x) = \sqrt{1 + \sqrt{2x}}$. Use the **definition** of **derivative** to find $f'(x_0)$.

Q2. Use the limits to find all horizontal asymptotes to the curve of the function:

$$f(x) = \sqrt{4x^2 + 3x} - \sqrt{4x^2 + 6x}$$