King Fahd University of Petroleum and Minerals
Department of Mathematics and Statistics
Math 101 (172) Sec 12 - Quiz 4

Name: ID: Serial No.:

1. $\lim_{x \to 0^+} (\cos(2x))^{1/x^2}$

2. $\lim_{x \to 0} \frac{\sin^{-1}(2x)}{x}$

3. Find the inflection point(s) of the graph of the function $f(x) = \dfrac{x-1}{x^2}$

4. A rectangle has its base on the x-axis and its upper two vertices on the parabola $y = 12 - x^2$. What is the largest area the rectangle can have?