

Department of Mathematics and Statistics KFUPM
MATH 101-25 Quiz#4, Time: 20 mins

Student's Name: _____ ID: _____

Q.No.1:- Let $f(x) = \sin^{-1}\left(\frac{x-1}{x+1}\right) + 2 \cot^{-1} \sqrt{x}$; $x \geq 0$. Find $f'(x)$ and **simplify your answer**.

Sol:

Q.No.2: - Given $y = \ln\left(\frac{1}{\ln x}\right)$ and $g(x) = xy'' + y'$. Find $g'(2)$.

Sol: