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

MATH 101 – Quiz 2 **Term 081**

NAME:_____ **ID**:_____

Exercise

Let $f(x)=\begin{cases}\dfrac{x-1}{\sqrt{x^2-1}}, & x\neq 1\\ 0, & x=1\end{cases}$.

(1) Find the domain of f (Justify)

(2) Find $\lim\limits_{x\to-\infty} f(x)=$

(3) Find $\lim\limits_{x\to 1^+} f(x)=$

(4) Find $\lim\limits_{x\to -1^-} f(x)=$

(5) Find all intervals where f is continuous? (Justify)