

TEST No.1, MATH 101(2007-I) (Quiz I)

Date Saturday September 29, 2007 (10:00PM) (5-203).

ID:..... Sec. 19 (11:00AM), 23 (1.10:00PM) 25 (2.10:00PM)

NAME :

Q.1 Let

$f(x) = \frac{x^3 - 1}{x^2 - 1}$. Evaluate $L = \lim_{x \rightarrow 1} f(x)$ (5 points)

Q.2

a) Use δ and ε to explain the meaning of $L = \lim_{x \rightarrow a} f(x)$

b) Let $f(x) = 3x - 12$. Use δ and ε to explain $L = \lim_{x \rightarrow 5} f(x) = 3$

c) For $\varepsilon = 0.5$ find the corresponding two values of δ

(5points)

TEST No.1I, MATH 101(2007-I) (Quiz II)

Q.

Let $f(x) = a[x] + b[-x]$, $[x]$ = The greatest integer $\leq x$.

Find the values of a and b when we have $f(2^+) = 1$ and $f(2^-) = 2$. (10 points)