Math 101 - Quiz#1	/10	Name:
		Id No: Serial No.:

1. Evaluate the limit, if it exists (show **all** of your work)

a) $\lim_{x\to 1^-}\left(\frac{x^2-|x-1|-1}{|x-1|}\right)$

b) $\lim_{x\to 2}\left[\left(\frac{x-2}{x}\right)^6\cdot\cos\frac{x+\pi}{(x-2)^6}\right]$ *(By the Squeeze Theorem).*

c) $\lim_{x \to \frac{1}{5}} (5x - [\![5x]\!])$,

where $[\![\ . \ ]\!]$ *denotes the greatest integer function, i.e. the greatest integer less than or equal to x.*

2- Find all vertical asymptote(s) of $f(x) = \frac{x^2+5x+6}{x^2+2x-3}$