Math 181 Quiz 2 Version A

1. Explain what $\lim\limits_{x \to \infty} f(x) = L$ means in terms of inequalities using N and ϵ.

2. Use algebraic simplifications to find the limits

(i) $\lim\limits_{x \to 1} \dfrac{x - 1}{x^2 - 1}$

(ii) $\lim\limits_{x \to \infty} \dfrac{x^2 + 3x - 1}{2x^2 - 4x + 3}$