Math 108   **Name** (print)_____

Quiz 3   **Spring 2006**

Work carefully and neatly. You must show all relevant work! You may receive no credit if there is insufficient work. NO GRAPHING CALCULATORS!

[3pts]   1. Write the equation of the line that is through the point $(-1, 5)$ and parallel to the line $4y - 12x = 5$.

[3pts]   2. An open box with a square base is to have a volume of 1,200 cubic inches. Express its surface area as a function of the length of its base.

[4pts]   3. Find the limits, if they exist.

a) $\lim\limits_{x \to 2} \dfrac{x^2 - 4}{x^2 + x + 1}$

b) $\lim\limits_{x \to 3} \dfrac{x - 9}{\sqrt{x} - 3}$