Math 1100-05, Quiz 1, 9/9/06 **Name:** _____

There are 3 questions worth 5 points each.
You MUST SHOW YOUR WORK for full credit. Good luck!

(1) (5 Points) Write an equation of the line that passes through the following points. Then use the equation to sketch the graph.
$(\frac{7}{8}, \frac{3}{4}), (\frac{5}{4}, -\frac{1}{4})$

(2) (5 Points) Evaluate the difference quotient and simplify the result.
Let $f(x) = \frac{1}{x+4}$, evaluate: $\frac{f(x+\Delta x)-f(x)}{\Delta x}$

(3) (5 Points) Find the inverse function of f. Then sketch the graphs of f and f^{-1}.
$f(x) = \sqrt{4 - x^2}$, for $0 \leq x \leq 2$