

**MATH 2**  
**PROBLEM OF THE WEEK 1**  
Due Friday, January 10th, 2003 before the quiz.

*Please show all your work!*

Name: \_\_\_\_\_

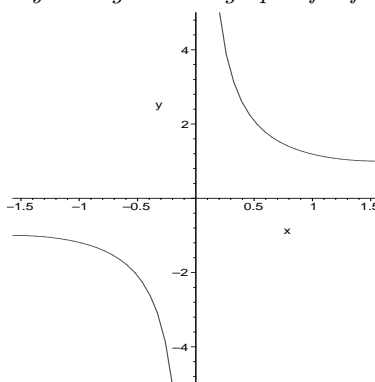
**Problem 1.** Given a function  $f(x)$  find the formula for the derivative of

(1)  $f^{-1}(x)$  and

(2)  $(f(x))^{-1}$

in terms of  $f(x)$ .

**Problem 2.** Suppose that you're given the graph of a function  $f(x)$ :



Graph

(1)  $f^{-1}(x)$

(2)  $(f(x))^{-1}$