Section ____________ **Name** ____

TA ________________ **Student Number** ______________________________

Math 126B **Calculus With Analytic Geometry III** **Spring 1995**

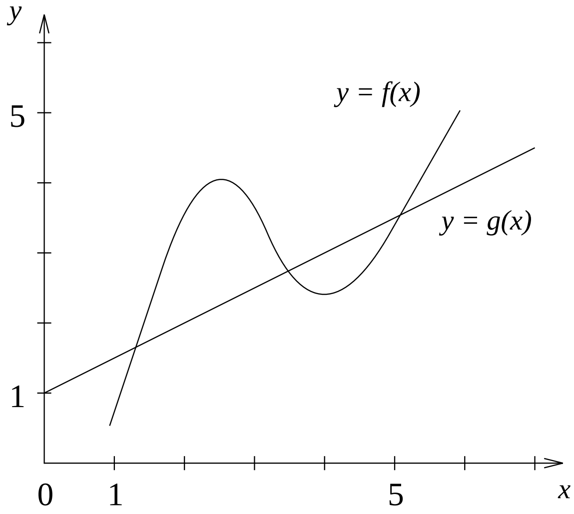
QUIZ #1

3/30/95

Straight lines must be drawn with a ruler; no credit will be given if drawn by hand. Don't worry about algebraically simplifying numbers (i.e. you may leave radicals in the denominator, fractions unreduced, etc.). **Show your work.**

1. The two functions $y = f(x)$ and $y = g(x)$ are given by their graphs below. We define a new function $h(x)$ by $h(x) = f(g(x))$. Find *all* values of x such that $h'(x) = 0$. If there are none, write NONE.

   $x =$ ____________



2. Below are three vectors, $\vec{v}$, $\vec{w}$, and $\vec{x}$. Solve the equation $\vec{w} = a\vec{v} + b\vec{x}$ for the scalars a and b. If there are no solutions, write NONE.

   $a =$ ____________ ; $b =$ ____________