## ${\rm Math~181~Quiz~4~Version~A}$

1. Use the limit definition of derivative to explain why  $f'(x) = \frac{-1}{x^2}$  when  $f(x) = \frac{1}{x}$ .

2. Use the limit definition of derivative to explain why w'(x) = f'(x)g(x) + f(x)g'(x) when w(x) = f(x)g(x).