TA/classroom: $\qquad$

## Quiz 4

Oct. 31, 2007

1. (10 pts) Given function $f(x)=\frac{1}{x} \quad($ for $x \neq 0)$, compute the $f^{\prime}(2)$ by definition $\left(f^{\prime}(a)=\lim _{h \rightarrow 0} \frac{f(a+h)-f(a)}{h}\right)$.
2. ( 10 pts ) Given function $f(x)=\sqrt{x+1} \quad$ (for $x \geq-1$ ), compute the $f^{\prime}(x)$ by definition $\left(f^{\prime}(x)=\lim _{h \rightarrow 0} \frac{f(x+h)-f(x)}{h}\right)$.
