**Math 101 – Section 13** Name:_____

**Quiz 1** Signature:_____

Show all your work.

**1.** Evaluate the limit $\lim_{x\to 1} \dfrac{x^3+x-2}{\sqrt{x+3}-\sqrt{3x+1}}$ . (*Do not use L'Hôpital's Rule.*)

**2.** Let $m$ be the slope of the tangent line to the graph of $y = \sin(\pi/x)$ at the point $(6, 1/2)$. Express $m$ as a limit. (*Do not compute the limit.*)