Math 101-172-Sec.11 -Quiz #2

Name: **ID:** **SR:**

Question1: Find a number $\delta>0$ such that if
$0 < |x-2| < \delta$, then $|f(x)-8| < 0.1$, where $f(x) = 2+3x$

Question2: show that $f(x) = \begin{cases} 1-x^2, x \le 1 \\ \ln(x)\ , x > 1 \end{cases}$ continuous in $\mathbb{R}$.

Question3. Find the horizontal asymptotes for $f(x) = \frac{x^3-1}{|x|^3+1}$