KFUPM MATH101 Quiz#2 Sec. 2

Name Sr.#

1) Use the graph of $f(x) = \frac{1}{x}$ to find a number δ such that If $|x - 3| < \delta$ then $\left|\frac{1}{x} - \frac{1}{3}\right| < \frac{1}{5}$.

1) **Q2** Show that the equation $e^x = 4 - x - \sqrt{x}$ has at least one real solution between 0 and 1.

2) Find the horizontal and vertical asymptotes of the curve $y = \frac{\sqrt{2x^6+x^3}}{-3x^3+x-1}$

3) Evaluate $\lim_{n\to 0}[|sinx|]$