QUIZ 280 MATH

NAME:

Use the **DEFINITION** to show that $\lim_{n\to\infty} \frac{1}{3^n} = 0$

Find $\lim_{n\to\infty} \sqrt{n+1} - \sqrt{n}$.

Explain why $(4^n) is\ divergent$

if$x_n = 1,4,9,16, \ldots the\ nth\ term\ equals.$

if $0 < a < b,\ use\ Squeese\ Theorem\ to\ show\ that\ \lim_{n\to\infty} \sqrt[n]{a^n + b^n} = b$

Bounce:

For a,b> 0 $Show\ that\ \lim_{n\to\infty} \sqrt{(n+a)(n+b)} - n = \frac{a+b}{2}$