

Week 3 Recitation Problems

MATH:113, Recitations 304 and 305

The Squeeze and Intermediate Value Theorems

1. $\lim_{t \rightarrow 0} t^2 \sin\left(\frac{1}{t}\right)$
2. Show that the function $f(x) = x^4 + x - 3$ has a solution on the interval $[0, 2]$.
3. $\lim_{t \rightarrow \infty} \frac{\sin t}{t}$
4. Does the function $f(x) = x^3 + 3x^2 + x - 2$ have a root on $[0, 1]$? If so, approximate it.