

MATH 145 Calculus for Engineering and Science I

Recitation 4

November 6th, 2025

1. For each of the following polynomial functions f , find an integer n such that $f(x) = 0$ for some x between n and $n + 1$.
 1. $f(x) = x^3 - x + 3$
 2. $f(x) = 4x^2 - 4x + 1$
2. Find the least upper bound and the greatest lower bound (if they exist) of the following sets.
 1. $\{1/n : n \in \mathbb{N}\}$
 2. $\{x : x^2 + x + 1 \geq 0\}$