

## Pre-class worksheet 2: infinite limits

Calculus I, section 10

Due September 19, 2023 by 4:10 PM

In class, we talked about infinite limits. Work out the following examples.

**Problem 1.**  $\lim_{x \rightarrow \infty} \frac{1}{x^2+1} - 3$

**Problem 2.**  $\lim_{x \rightarrow -\infty} \frac{x^2+1}{x^2}$

**Problem 3.**  $\lim_{x \rightarrow \infty} \frac{7}{x+2^x}$

**Problem 4.**  $\lim_{x \rightarrow \infty} \frac{x^2+2x+1}{x+1}$