Math 114 Spring 2017
Calculus I Practice Homework 3.5
Do not turn in

1. From the definition, Prove that $\lim_{x \to +\infty} \frac{x+1}{x+3} = 1$.

2. From the definition, prove that $\lim_{x \to +\infty} \frac{x-1}{x^2} = 0$.

3. $(\star)$From the definition, prove that $\lim_{x \to -\infty} \frac{x^2}{x+1} = -\infty$.