

Homework 4

Prove that

(a) $\lim_{x \rightarrow \infty} 2x^2 = \infty$

(b) $\lim_{x \rightarrow 0} \frac{1}{x^2} = \infty$

(c) $\lim_{x \rightarrow -1^+} \frac{1}{x+1} = \infty$

(d) $\lim_{x \rightarrow \infty} \sqrt{x} = \infty$

(e) $\lim_{x \rightarrow -\infty} \frac{3x+2}{2x+3} = \frac{3}{2}$.