

Homework 11: Extra Problems

In each case, determine whether the limit exists. If so, evaluate it. Show your work.

Extra Problem 1: $\lim_{x \rightarrow 2} \frac{x^2 + x - 6}{x - 2}$

Extra Problem 2: $\lim_{x \rightarrow 2} \frac{x^2 - x + 6}{x - 2}$

Extra Problem 3: $\lim_{x \rightarrow 3} \frac{x^2 - 9}{x + 1}$

Extra Problem 4: $\lim_{x \rightarrow 0} \frac{(4+x)^2 - 16}{x}$

Extra Problem 5: $\lim_{x \rightarrow 0} \frac{\sqrt{1+x} - 1}{x}$