

Name:

[1 pt]

Problem 1. Evaluate the limit

$$\lim_{x \rightarrow 3} \frac{x^2 - 9}{x^2 + x - 12} .$$

[5 pts]

Problem 2. Let $f(x) = \begin{cases} \sqrt{4-x} & \text{if } x < 4, \\ x & \text{if } x > 4. \end{cases}$ Evaluate the limit $\lim_{x \rightarrow 4} f(x)$.

[5 pts]