

**Problem 1**

Compute  $\lim_{x \rightarrow 2} \frac{x^2 - x - 2}{x^2 - 3x + 2}$

**Problem 2**

Compute  $\lim_{x \rightarrow -1} \frac{x^2 - 2}{x^2 + 2}$

**Problem 3**

Compute  $\lim_{x \rightarrow 2} \frac{x^2 - 4}{x^2 - 5x + 6}$

**Problem 4**

Compute  $\lim_{x \rightarrow -1} \frac{\sqrt{x^2 + 8} - 3}{x + 1}$

**Problem 5**

Compute  $\lim_{\theta \rightarrow 0} \frac{\frac{1}{5+\theta} - \frac{1}{5}}{\theta}$