

微積分作業

September 12, 2025

1 Calculate

1. $\lim_{x \rightarrow 3} \frac{\sqrt{x+1}-2}{x-3}$ (3%)

2. $\lim_{x \rightarrow 0} \frac{\sin 5x}{2x}$ (3%)

3. $\lim_{x \rightarrow 0} x \cos\left(\frac{1}{x}\right)$ (Hint: Use squeeze theorem) (4%)