1. State the squeeze theorem precisely.

Suppose there is an $\epsilon > 0$ such that $f(x) \leq g(x) \leq h(x)$ for all $0 < |x - a| < \epsilon$. Suppose further that

$$\lim_{x \to a} f(x) = L = \lim_{x \to a} h(x).$$

Then $\lim_{x \to a} g(x) = L$.

2. Evaluate

$$\lim_{h \to 0} \left( \frac{1}{h} - \frac{1}{h^2 + h} \right)$$

\[
\lim_{h \to 0} \left( \frac{1}{h} - \frac{1}{h^2 + h} \right) = \lim_{h \to 0} \left( \frac{h + 1}{h^2 + h} - \frac{1}{h^2 + h} \right) \\
= \lim_{h \to 0} \left( \frac{h}{h^2 + h} \right) \\
= \lim_{h \to 0} \left( \frac{1}{h + 1} \right) \\
= 1
\]