

MATH 106-004 Quiz 3

Date: April 9, 2025

NAME:.....

Time: 10:00–10:20

STUDENT ID:.....

Problem 1 Evaluate the following limits.

(a) (25 points) $\lim_{x \rightarrow \pi^+} \frac{\sin x}{\sqrt{x - \pi}}.$

(b) (35 points) $\lim_{x \rightarrow 0} \frac{\int_0^x (\csc t - \cot t) dt}{x}.$

(c) (40 points) $\lim_{x \rightarrow 0^+} |\ln x|^x.$