

Quiz

Math 102, Term 172

NAME:

ID:

Problem 1. Find $\lim_{n \rightarrow \infty} \frac{1}{n^2} [\sqrt{n^2 - 1^2} + \sqrt{n^2 - 2^2} + \dots + \sqrt{n^2 - n^2}]$

Problem 2. Find the equation of the tangent line of $f(x) = \int_{\cos x}^{2 \sin x} \frac{dt}{4+t^2}$ at $x = \frac{\pi}{2}$.