QUIZ #9: CALCULUS 1A (Stankova) Wednesday, March 31, 2004 Section 10:00–11:00 (Voight)

Name:

Please complete the following problem(s) in the space provided. You may *not* use a calculator. You will have 15 minutes to complete the quiz.

Please include all relevant intermediate calculations and explain your work when appropriate.

Problem 1. Find the limit. Use l'Hôpital's Rule where appropriate.

 $\lim_{x \to \pi/2^+} \frac{\ln(x - \pi/2)}{\tan x}$

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Problem 2. Find the limit. Use l'Hôpital's Rule where appropriate. $\lim_{x\to 0^+} \sin(2x) \ln x.$

QUIZ #9: CALCULUS 1A (Stankova) Wednesday, March 31, 2004 Section 11:00–12:00 (Voight)

Name:

Please complete the following problem(s) in the space provided. You may *not* use a calculator. You will have 15 minutes to complete the quiz.

Please include all relevant intermediate calculations and explain your work when appropriate.

Problem 1. Sketch the curve. Find an equation of the slant asymptote.

$$y = \frac{2x^2 - x - 1}{x + 1}.$$