## QUIZ #5: CALCULUS 1A (Stankova) Wednesday, February 25, 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**. Differentiate the function:

 $y = x^{\ln x}.$ 

## QUIZ #5: CALCULUS 1A (Stankova) Wednesday, February 25, 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.

(You may certainly use differentiation laws!)

Problem 1. Differentiate the function

 $f(x) = \sin(\ln(2x)).$ 

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Problem 2. Differentiate the function

$$h(x) = \ln(x + \sqrt{x^2 - 1}).$$