

QUIZ #4: CALCULUS 1A (Stankova)

Wednesday, February 18, 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 derivative of the function*

$$F(x) = \frac{x^2 + 6\sqrt{x} + 5}{\sqrt{x}}$$

in two ways: by using the Quotient Rule and by simplifying first. Show that your answers are equivalent.

QUIZ #4: CALCULUS 1A (Stankova)

Wednesday, February 18, 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. *Find the derivative of the function*

$$f(x) = \frac{2}{x^2 - x}$$

using the definition of the derivative. State the domain of the function and the domain of the derivative.

You may not use only differentiation laws!