Name: _____

4-digit code: _____

- Write your name and the last 4 digits of your SSN in the space provided above.

- The test has two (2) pages, including this one.

- You have fifty (50) minutes to complete the exam.

- Enter your answer in the box(es) provided.

- You must show sufficient work to justify all answers unless otherwise stated in the problem. Correct answers with inconsistent work may not be given credit.

- Credit for each problem is given in parentheses at the right of the problem number.

- No books, notes or calculators may be used on this test.

Page	Max. points	Your points
2	100	

Problem 1 (20 pts). Compute the derivative of the following function:

$$f(x) = \int_{\sin x}^{\pi} e^{-t^2} \, dt$$

Problem 2 (20 pts each). Compute the following integrals:

(a) $\displaystyle\int \frac{dx}{\sqrt{6x}}$

(b) $\displaystyle\int \sec x \tan x \, dx$

(c) $\displaystyle\int \frac{\ln x}{x} \, dx$

(d) $\displaystyle\int \frac{\sqrt{x}}{3x^2 + 2} \, dx$