

Math 376

Homework Set #1, due Wednesday, April 3

Please do problems #1 - #4 on this sheet, and staple your book problems to this sheet.

1. (5 points) Mathography

(a) What is your hometown and where did you go to high-school?

(b) What math classes have you taken here at Central?

(c) What was your favorite math class?

(d) What's the neatest thing you've learned in a math class?

(e) Name (at least) one topic from the index of your book that you'd like to learn about.

2. (5 points) Using complete sentences, explain the difference in the meaning of the word "solution" in each of the following sentences: "1 is a solution of $\ln(x^2 - x + 1) = 0$ ", and "1 is a solution of $x' = \cos(x - 1) - 1$ ".

3. (5 points) Is $u(t) = e^{-t^2}$ a solution of the differential equation $u'' - 2tu' = 4t^2u$? Why or why not?

4. (5 points) Evaluate $\int \frac{2}{x^2 - 6x + 8} dx$.

5. (5 points) Book Problems: Sect 1.1 #1, 5, 7, 9, 11, 17, 19