Practice Test 4

Alex Iosevich

April 24, 2007

Please note that this practice test DOES NOT contain all possible problems that could appear on the test on Thursday, just a representative sample. Also, please study the definitions. They may well appear on the test and give you an opportunity to pick up points without calculating anything.

Problem 0.1. Problem #10 on page 284.

Problem 0.2. Problem #19 on page 284.

Problem 0.3. Problem #40 on page 285.

Problem 0.4. Graph the following function:

$$y = \frac{x^3}{x^2+1}.$$

Problem 0.5. Graph the following function:

$$y = 3\sin(x) - \sin^3(x).$$

Problem 0.6. Graph the following function:

$$y = 2x^5 - 5x^2 + 1.$$

Problem 0.7. Differentiate the following function:

$$h(x) = \int_{\sin(x)}^{\cos^2(x)} \frac{y^2+y+1}{\tan(\sec^2(y^4+1))}.$$

Problem 0.8. Problems 25, 32 and 38 on page 357.

Problem 0.9. Problems 11, 20, 47 and 27 on page 366.