V3

1	2	3	4	5	6

Last Name:_____

First Name:_____

ID:_____ Section:____

Math 1051 Midterm #3. November 30, 2001

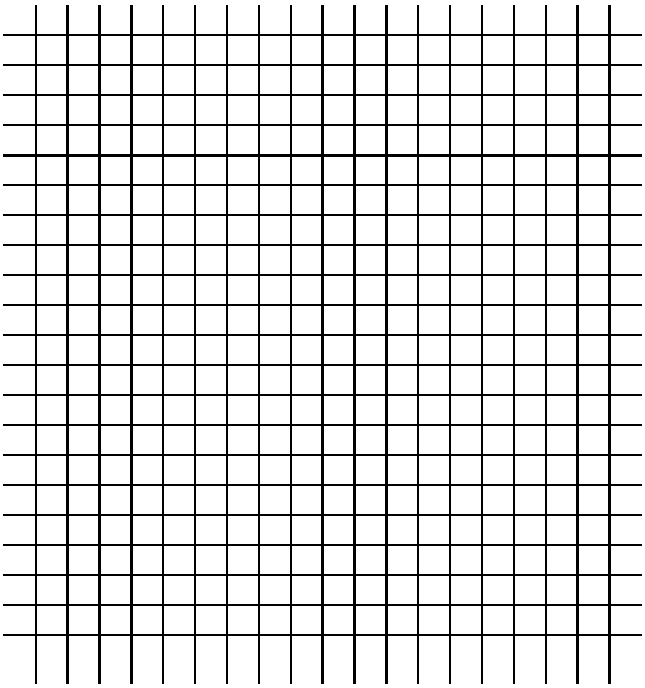
Attention! Please, note that this is the closed book test. You are not allowed to use graphing calculator. Simple calculator is allowed. Please, show all important steps in you solution but do not make your solution excessively long.

1. Solve the inequality

$$x^3 < 27.$$

2. Graph the rational function with a hole

$$R(x) = \frac{x^2 - 9}{x^2 - x - 6}.$$

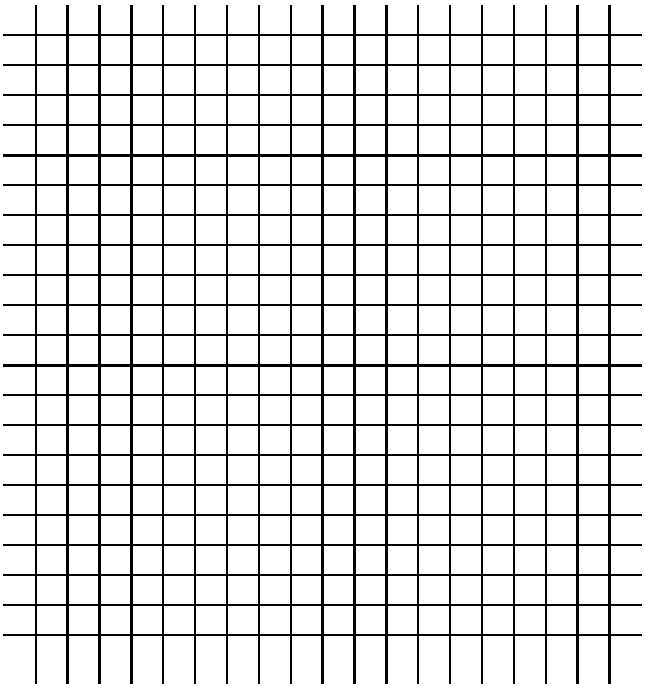


3. Solve the equation

$$\log_2(x^2 + 3x + 4) = 3.$$

4. Graph the inverse function for the function

$$f(x) = \frac{1}{(x-1)^3} - 1.$$



5. Define the domain of the function.

$$f(x) = \log_{(1-x)}(1 - x^2).$$

6. Evaluate without using a calculator

$$\log_{16}(4^3).$$