Math 204- Discrete Mathematics, Spring 2010 Quiz 4, April 5, 2010, 15:40 group Time: 20 minutes

Write your solutions clearly, provide explanation, etc. Do not forget to write your name and ID No on top of the page!

Problem 1 (6+7 pts). Let n = 624 and m = 735.

a. Determine gcd(n, m).

b. Use Euclidean algorithm to write gcd(n, m) as a linear combination of n and m.

Problem 2 (7 pts). Solve the congruence $x^{44} - 3 \equiv 6 \mod 7$.