

**Math 204- Discrete Mathematics, Spring 2010**

**Quiz 4, April 5, 2010, 17:40 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 (7 pts each).**

a. Check (in the shortest possible way) if the number  $n = 353$  is prime or not.

b. Find the smallest positive integer  $x$  that solves the congruence  $27x \equiv 4 \pmod{353}$ .

**Problem 2 (6 pts).** Write the integer  $n = 723$  in base 5.