# Math 204- Discrete Mathematics, Spring 2010 <br> Quiz 4, April 5, 2010, 15:40 group <br> 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 ( $\mathbf{6}+\mathbf{7} \mathbf{~ p t s}$ ). Let $n=624$ and $m=735$.
a. Determine $\operatorname{gcd}(n, m)$.
b. Use Euclidean algorithm to write $\operatorname{gcd}(n, m)$ as a linear combination of $n$ and $m$.

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

