

Math 305, Quiz 5
October 25, 2007

Name: _____

- (1) (5 pts) Prove that, if $\theta: G \rightarrow H$ is an isomorphism and G contains a subgroup of order m , then H contains a subgroup of order m .

- (2) (5 pts) Use the Fundamental Theorem of Finite Abelian Groups to show that there are five isomorphism classes of groups of order p^4 where p is a prime.