Math 546 Summer 2002 Exam 3

PRINT Your Name:_____

There are 10 problems on 5 pages. Each problem is worth 5 points.

I will put your exam outside my office door after I have graded it. You may pick it up any time before class on Monday. If I know your e-mail address, I will e-mail your score on Exam 3 to you.

1. Define "cyclic group". Use complete sentences.

The group G is a cyclic group if there exists an element $g \in G$ such that every element in G is equal to g^m for some integer m.

2. Define "generator of a group". Use complete sentences.

The element g of the group G is a generator of G if every element of G is equal to g^m for some integer m.