

## Lesson Assignment

**Name:** \_\_\_\_\_

For this assignment you will write a lesson or sample for a text book teaching mathematics to next year's transition's students. Think from your own perspective. What would make the concepts clear? How would you like to see the material presented? And how would you like to see examples and proofs presented?

Title: Groups

1. Description of Groups
  - (a) formal definition of a group
  - (b) examples of groups - a few examples some commutative, some not commutative
  - (c) example of a structure that is NOT a group
  - (d) formal proof that some group is a group
2. formal definition of a subgroup
  - (a) subgroup test state and formally prove
  - (b) Show examples of subgroups of groups
  - (c) Formally prove a subgroup is a subgroup

As always type up your answers in complete English. This should be at least 3 pages.