

1035-Z1-1319 **Vicky Williams Klima*** (klimavw@appstate.edu), Mathematical Sciences Department,
Appalachian State University, Boone, NC 28608. *Using Discussion Activities in the Abstract
Algebra Classroom*. Preliminary report.

Often when we teach abstract algebra we tend to give the necessary definitions, state a theorem and immediately follow the statement of the theorem with its proof. In this talk we present some intermediate activities that we can undertake after we state the definitions and before we tackle theorems and proofs. These activities lead the students to make conjectures that they can then test and either prove or disprove. Typically the activities include assigning each student in the class a small computational problem for homework and then using the next class period to share our computations with each other. Then, together we look at the large amount of data that we have produced, form conjectures and begin the process of proving or disproving these conjectures. (Received September 19, 2007)