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Heakyung Lee* (leeh@winthrop.edu), Winthrop University, Department of Mathematics, Rock Hill, SC 29733. *Labs on Public Key Cryptograph and Subgroups of S_4 using technologies.*

In this presentation, two examples of labs on Abstract Algebra using Mathematica and GAP are shown. In the first example, students are paired to send a message and decode the message using Public Key Cryptograph. In the second example, students are asked to find all subgroups of S_4 and to discuss an isomorphism between subgroups of the same order. (Received September 23, 2006)