

MAT 331, Spring 2014

## **Project 3: Encryption**

*Due April 29*

In this project, you are to put into practice some of the ideas of encryption that we have studied in class. For this project, you are to choose one of the enciphering methods listed below, research it, implement it in maple, and describe the method and any relevant aspects of it (whether they are concerned with its history, its security or lack thereof, or other aspects you may choose). You should choose some suitable test cases to demonstrate your implementation.

The suggested encryption schemes are

- Double Transposition.
- Bifid cipher.
- Diffie-Hellman key exchange protocol (not encryption, but related).
- The Cayley-Purser algorithm.
- El Gamal encryption.

As before, it is important to realize that exposition is an important part of this project.