

MATH 587/CSCE 557: HOMEWORK 4, DUE FEB 22.

1. The following is an English sentence encrypted by means of a general substitution cipher (with spaces eliminated). Using frequency analysis, decrypt it:

RSZWO RSZCK CSGPS GVRTP CKCSG PRSJP YOGVR NPZND ZWOCH
ZCROC GZWOR SZWOR SZCKS XQNHX VNDWJ YNZWO PCPSG VHOSP
NGBTZ ZWOCG GOHXC DONDZ WOCHS HZPCP CGZWO QNHXV NDDNH
RPCGZ WOYHN KOPPN DVCSX OKZCK SGVCZ PSHLT ROGZB JROZS
YWNH

Note that the most frequent letters in English are (in decreasing order) E,T,A,...; most frequent digrams are TH,HE,IN,...; most frequent trigrams are THE,AND,ING,...