

1035-G1-1202      **Jerzy Wojdylo\*** (jwojdylo@semo.edu), Department of Mathematics, Southeast Missouri State University, One University Plaza, Cape Girardeau, MO 63701. *Public Key Cryptography with TI Voyage 200.*

RSA and ElGamal are popular public key cyptosystems. An overview and classroom examples of both cryptosystems will be demonstrated. Additionally, custom functions and programs for exponentiation, multiplicative inverses in modular arithmetic, and conversions between text and numbers will be presented. A surprising property of random number generator almost destroyed the credibility of the ElGamal cryptosystem. (Received September 19, 2007)