Name:

1. [3pts] Encrypt the message DO NOT PASS GO by translating the letters into numbers, applying the given encryption function, and then translating the numbers back into letters.
2. [3pts] Decrypt these messages that were encrypted using
   1. EOXH MHDQV
   2. WHVW WRGDB
   3. HDW GLP VXP
3. [2pts] Alice wants to send to all her friends, including Bob, the message “GET OUT NOW” so that he knows that she sent it. What should she send to her friends, assuming she signs the message using the RSA cryptosystem.
4. [2pts] Find the following using Fermat’s Little Theorem