

My signature testifies that I have neither given nor received aid on this quiz.

Name: _____

SUID: _____

CIS 400/628
Spring 2005
Quiz 1

1. (5 pts.) Encrypt the following phrase with a multiplicative cipher and key 3.

Read *Cryptonomicon* by Neal Stephenson!

A	B	C	D	E	F	G	H	I	J	K	L	M
N	O	P	Q	R	S	T	U	V	W	X	Y	Z

R	E	A	D		C	R	Y	P	T	O	N	O	M	I	C	O	N
B	Y		N	E	A	L		S	T	E	P	H	E	N	S	O	N

2. (1 pt.) Give the definition of "relatively prime" in terms of gcd.

3. (4 pts.) Consider the set $S = \{x \mid x \in \mathbb{Z} \text{ and } x > 1\}$. Prove that any two consecutive integers in S are relatively prime.