Name: Andre Cameron

ID #: 1701496 Assignment 3

7.00.6111110110					
Code (GCD)			Remove constants and coefficients		
int temp;	С	С	С		log(n)
while(y != 0) {	log(n)	log(n)			log(n)
temp = y;	С		log(n)*3c	c+c+log(n)*3c	Therefore the
y = x % y;	С	c+c+c	log(II) Sc	C+C+log(II) 3C	answer is
x = temp;}	С				O(log(n))
return(x);	С	С	С		O(log(II))

Code (Hanoi)		<u>Time</u>	<u>!</u>	Remove constants and coefficients
int ans = 1;	С	С		n
for(int i = 0; i < n; i++) {	n n*c		c+c+n*c	Therefore the answer is
ans = ans * 2;}	С	11.0	C+C+II*C	Therefore the answer is
return(ans - 1);	С	С		O(n)