

1. Decipher message

OPK CWC ILY NED YSB FVH WBN EMF E

using vernam two-tape with keys *hair* and *algebra*.

2. Find $\text{lcm}(27066, 27834)$.
3. For this problem you will be using the Vernam crypto system.

A	-	00000	H	-	00111	O	-	01110	V	-	10101
B	-	00001	I	-	01000	P	-	01111	W	-	10110
C	-	00010	J	-	01001	Q	-	10000	X	-	10111
D	-	00011	K	-	01010	R	-	10001	Y	-	11000
E	-	00100	L	-	01011	S	-	10010	Z	-	11001
F	-	00101	M	-	01100	T	-	10011			
G	-	00110	N	-	01101	U	-	10100			

Using the above code turn the message “pens” into a binary message. Next make a Vernam key by flipping a coin (enough times to make a big enough key). Then encipher the message using the key.

4. Find the schedule of classes for the spring semester on your my.sandiego.edu site. Find three classes that you are thinking about and write down the classes and the times.