Problem 3. «A long-awaited event»

Bob received from Alice the secret message

`L78V8LC7GBEYEE`

informing him about some important event.

It is known that Alice used an alphabet with 37 characters from `A` to `Z`, from `0` to `9` and a space. Each of the letters is encoded as follows:

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
U	V	W	X	Y	Z	0	1	2	3	4	5	6	7	8	9	SPACE			
20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36			

For the encryption, Alice used a function f such that $f(x) = ax^2 + bx + c \pmod{37}$ for some integers a, b, c and f satisfies the property

$$f(x-y) - 2f(x)f(y) + f(1+xy) = 1 \pmod{37} \text{ for any integers } x, y.$$

Decrypt the message that Bob has received.