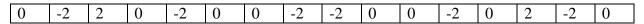
## 2b) Considering our encoded sequence:



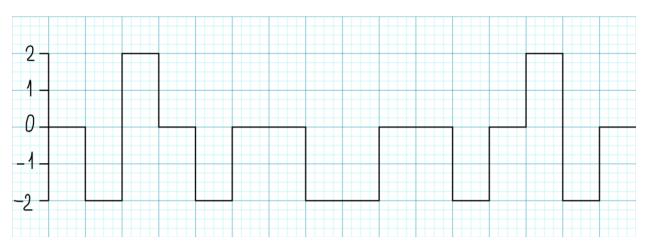


Figure 1. Diagram of the encoded sequence

And taking second sender's original chipping sequence:

-																
	1	4	4	1	4	4	4	4	4	1	-1	1	4	4	4	1
	- 1		I _ I	I I		_		l I		I I	_			l _ l		I I
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

We are now able to start decoding  $2^{nd}$  receiver's data:

1) We multiply the sequences of the first 8 bits of "encoded sequence of two senders" and "chipping sequence of  $2^{nd}$  sender" in the following way: 0 \* 1 = 0, 1\*(-2) = -2, -1 \* 2 = -2

## Resulting in data bit:

Λ	2	2	Λ	2	Λ	Λ	_
U	-2	-2	U	-2	U	U	-2

2) We multiply the sequences of the second 8 bits of "encoded sequence of two senders" and "chipping sequence of  $2^{nd}$  sender" in the same way

## Resulting in data bit:

-2 0 0	-2	0	-2	-2	0
--------	----	---	----	----	---

3) Thus getting two data bits with their sizes encoded:

$$0-2-2+0-2+0+0-2=-8$$

$$-2 + 0 + 0 - 2 + 0 - 2 - 2 + 0 = -8$$

4) Which we further divide by 8 bits to get the actual data bits:

$$d_1^2 = -8 / 8 = -1$$
;  $d_0^2 = -8 / 8 = -1$