

Security: Polybius cipher

The Polybius cipher is an encryption method that uses a numerical or letter matrix to assign letters to pairs of digits. By default, a 5×5 matrix is used, on which the letters of the alphabet are placed, with one letter (usually 'j') being omitted or combined with another letter (e.g. 'i').

Polybius matrix

For this example, we will use the following matrix (alphabet without 'j'):

	1	2	3	4	5
1	A	B	C	D	E
2	F	G	H	I/J	K
3	L	M	N	O	P
4	Q	R	S	T	U
5	V	W	X	Y	Z

Name encryption

First name: Kacper

- K → 25
- A → 11
- C → 13
- P → 35
- E → 15
- R → 42

Name: Ostrowski

- O → 34
- S → 43
- T → 44
- R → 42
- O → 34
- W → 52
- S → 43
- K → 25
- I → 24

Summary

Polybius matrix:

	1	2	3	4	5
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	1	2	3	4	5
1	A	B	C	D	E
2	F	G	H	I/J	K
3	L	M	N	O	P
4	Q	R	S	T	U
5	V	W	X	Y	Z

- KACPER = 25 11 13 35 15 42
- OSTROWSKI = 34 43 44 42 34 52 43 25 24