

Decryption of affine ciphers

Overview. You will decrypt an affine-enciphered cryptogram.

Things to do.

1. Each of the one-word cryptograms below has been encrypted using a an affine cipher. The key is given to the right of the cryptogram. The key (a, b) means that the cryptogram was enciphered using the map $x \mapsto ax + b \bmod 26$. Pick one of the cryptograms, determine the decryption mapping, and decrypt the word.

	Cryptogram	Key
1.	FVBINYZ	(23,11)
2.	LBQEBIA	(21,8)
3.	HQLPDYL	(15,16)
4.	NRZDUI	(9,7)
5.	ZMSEKFE	(5,18)
6.	IUYORKCZ	(3,12)