

Ancient Ciphers

Barbara is interested in ancient history. While reading about scytale, Caesar's cipher, and related concepts, she discovered a nice puzzle. Some Latin sentences have been encrypted by methods similar to those used ages ago. Deciphering the hidden messages took Barbara many long autumn evenings before she was able to solve the puzzle.

Would you be able to solve the puzzle faster, as a programmer having a computer at your disposal?

As the solution to the problem, send a plain text file containing the decrypted text of the following sentences:

- 1: xzrmhxnijfynaijxfqtmhxsts
- 2: yjosxtrfswuemjsrxidclsqiddbihaykmkwaozsraidcrhbeqmmbarltwnu
- 3: znawzlqrebfbhmuqdbuhfcudyaqrdzqoewgkpkaydhqiyd
- 4: asuxjozaxyzksgyzukzozovkxk
- 5: xnwlrbibmqbhqcdarztowkkyhiddqwscdxrjjmowfyrxsjykbldbemfsarcxbynec

Submission format: Your text file should consist of five lines. Each line consists of the number of the sentence, a colon, a space, and either the decrypted sentence, or a question mark (in case you are unable to discover the plain text).

Each of the decrypted messages consist of lower case letters, spaces, and commas, only.

Example 1: Cipher text:

epdfoepejtdjnv

Plain text:

docendo discimus

Example 2: Cipher text:

ttirqakhoupnltdebxmenmmprlwaadcoyclehntivaesrubxa

Plain text:

verba docent, exempla trahunt

Example 3: Suppose that the sentences from Examples 1 and 2 are given as the third and fifth sentences of the puzzle, and that the other sentences are left unsolved. In this case the correct solution would be:

- 1: ?
- 2: ?
- 3: verba docent, exempla trahunt
- 4: ?
- 5: docendo discimus

Scoring

For each solved sentence you will score **2 points**.

Important note

All registered contestants are *required* to submit all source code and helper files written and used when solving the problem [here](#) (in ZIP format, max. 1 MB). If you did not write any source code, submit instead a concise description of how you obtained a solution.

Solutions which are not sufficiently motivated are subject to disqualification.