

On the Subject of The Affine Cycle

Ah shift, here we go again.

This module consists of a screen, eight dials with yellow labels, and a QWERTY keyboard.

The labels on the dials, when decrypted and read from left to right, spell out an eight letter word.

The number N , for each dial, is the number of 45° clockwise rotations from north to the direction the dial is pointing.

(This number is between 0 and 7.)

The alphabetic position of each letter is multiplied by $2N+1$.

The resulting product has 26 subtracted from it until it falls within the range [1,26].

The final number is the alphabetic position of the encrypted letter.

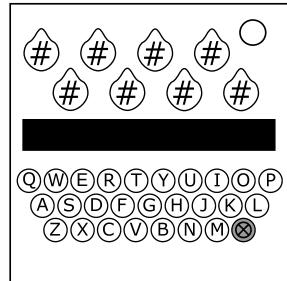
Once deciphered, find the word in the table below, the word written below it is the word that should be entered.

Apply the same encryption to the response word, and type out the encrypted response word using the keys.

The word is automatically submitted when eight keys are pressed.

The red button can be pressed at any time before the eighth key is pressed to cancel the input.

Inputting any of the eight letters incorrectly will cause a strike to be issued and reset the module.



Keyword Table

ADVANCED	ADDITION	ALLOCATE	ALTERING	BINARIES	BILLIONS	BULKHEAD	BULLETED
FORWARDS	JIGSAWED	HAZARDED	NUMERALS	BULLETED	QUICKEST	TOGETHER	YOURSELF
CIPHERED	CIRCUITS	COMPUTER	CONTINUE	DECryptS	DIVISION	DISCOVER	DISPOSAL
DISPOSAL	HUNKERED	ILLUSION	MONOTONE	FORTRESS	STARTING	VOLATILE	GLOOMING
ENCIPHER	ENTRANCE	EQUATION	EQUIPPED	FINISHED	FINDINGS	FORTRESS	FORWARDS
KNUCKLED	MULTIPLY	ULTRARED	BILLIONS	NANOGRAM	STANDARD	YEASAYER	QUINTICS
GAUNTLET	GAMBLING	GATHERED	GLOOMING	HAZARDED	HAZINESS	HUNKERED	HUNTSMAN
PROJECTS	JIMMYING	KILOWATT	QUADRANT	POSITION	LINEARLY	ALTERING	BINARIES
INDICATE	INDIGOES	ILLUSION	ILLUMINE	JIGSAWED	JIMMYING	JUNCTION	JUDGMENT
OBSCURED	LABELING	JUNCTION	VOLTAGES	UNDERLIE	COMPUTER	INDICATE	ZYMOGRAM
KILOWATT	KINETICS	KNOCKOUT	KNUCKLED	LIMITING	LINEARLY	LINKAGES	LABELING
ZUGZWANG	CIPHERED	MULLIGAN	REVERSED	HUNTSMAN	NUMBERED	POSITIVE	ZIGZAGGY
MONOGRAM	MONOTONE	MULTIPLY	MULLIGAN	NANOGRAM	NANOTUBE	NUMBERED	NUMERALS
YELLOWED	OCTUPLES	GATHERED	ROTATION	CIRCUITS	CONTINUE	YIELDING	BULKHEAD
OCTANGLE	OCTUPLES	OBSERVED	OBSCURED	PROGRESS	PROJECTS	POSITION	POSITIVE
OBSERVED	ILLUMINE	EQUIPPED	ALLOCATE	STOPPING	TRIGGERS	LIMITING	PROGRESS
QUADRANT	QUADRICS	QUICKEST	QUINTICS	REVERSED	REVOLVED	ROTATION	RELATION
LINKAGES	WHATEVER	HAZINESS	VICELESS	TOGGLING	MONOGRAM	ENTRANCE	FINISHED
STARTING	STANDARD	STOPPING	STOPWORD	TRIGGERS	TRIANGLE	TOGGLING	TOGETHER
RELATION	WINGDING	ENCIPHER	NANOTUBE	QUADRICS	DISCOVER	DECryptS	EQUATION
UNDERRUN	UNDERLIE	ULTIMATE	ULTRARED	VICINITY	VICELESS	VOLTAGES	VOLATILE
OCTANGLE	KNOCKOUT	ZIPPERED	UNDERRUN	TRIANGLE	WINNABLE	ULTIMATE	ADVANCED
WINGDING	WINNABLE	WHATEVER	WHATNOTS	YELLOWED	YEASAYER	YIELDING	YOURSELF
DIVISION	WHATNOTS	KINETICS	VICINITY	ADDITION	GAUNTLET	INDIGOES	STOPWORD
REVERSE		ZIPPERED	ZIGZAGGY	ZUGZWANG	ZYMOGRAM		
ROTATION		FINDINGS	REVOLVED	GAMBLING	JUDGMENT		