

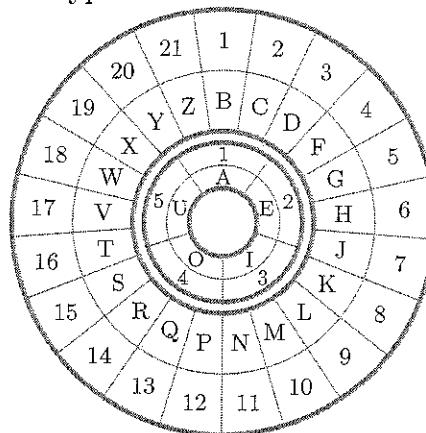
5. A shift cipher was applied to a short English sentence to get **U IB ILOHABO**.

(a) How many words did the sentence have before it was encrypted?

3 words

(b) How many letters did the first word have?

1 letter



(c) What was the first word (probably)?

A or I, but a three word sentence? Probably "I"

(d) What did the message (probably) say?

Before { I A? A? E? O? E
3 1? 1? 2? - 1? 2

After { 5 3 1 3 9 4 6 1 1 4
U IB ILOHABO

I → U, +2 on Vowels to encrypt
3 → 5 -2 on Vowels to decrypt

Second word is "am" or "a" or "at"
Sentence so "I am" sounds better

6. (a) Where does the double-it cipher take day?

Before { DAY
3 1 20

After { 6 2 40=19
GEX

Gex

M → B -9 on Consonants to encrypt
10 → 1 +9 on Consonants to decrypt

{ I AM AWESOME
3 1 10 1 18 2 15 - 1 10 2
5 3 1 3 9 4 6 1 1 4
U IB ILOHABO } I AM AWESOME

(b) The double-it cipher was applied to an English word to get **MPILN**. What was the original word?

Before { G H O S T
5 6 4 15 16

After { 10 12 3=8 9=30 11=32
M P I L N

Ghost