Mini-Exam2

Name: _____

- 1. (a) Convert "miniexam" into numbers.
- (b) What vowel goes with the number 3?
- 2. (a) What consonant goes with the number 30?
- (b) What consonant goes with the number -3?
- (c) What vowel goes with the number 437,578,382? (four hundred thirty seven million five hundred seventy eight thousand three hundred eighty two)
- 3. (a) Where does the shift by 3 cipher take **miniexam**?
- (b) What was shifted by 3 to get **GOUWOV**?
- 4. (a) What shift turns **miniexam** into **ZOBOILEZ**?
- (b) What shift turns **miniexam** into **RISIECAR**? (harder, explain your answer)



- 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?
- (b) How many letters did the first word have?
- (c) What was the first word (probably)?



- (d) What did the message (probably) say?
- 6. (a) Where does the double-it cipher take **day**?

(b) The double-it cipher was applied to an English word to get ${\tt MPILN}.$ What was the original word?

7. (a) What happens if you encrypt a message more than once? For instance, is there a simpler way of describing the "triple-ripple cipher" other than "first shift by 5, then shift by 7, then shift by 5 again"?

(b) Is the triple-ripple cipher three times as secure as a regular shift cipher?

Mini-Exam2

Name: _____

- 1. (a) Convert "miniexam" into numbers.
- (b) What vowel goes with the number 4?
- 2. (a) What consonant goes with the number 40?
- (b) What consonant goes with the number -4?
- (c) What vowel goes with the number 437,578,383? (four hundred thirty seven million five hundred seventy eight thousand three hundred eighty three)
- 3. (a) Where does the shift by 4 cipher take **miniexam**?
- (b) What was shifted by 4 to get **NOQEOX**?
- 4. (a) What shift turns **miniexam** into **CADAUNOC**?
- (b) What shift turns **miniexam** into **DIFIEPAD**? (harder, explain your answer)



- 5. A shift cipher was applied to a short English sentence to get **E UR URUFESL**
- (a) How many words did the sentence have before it was encrypted?
- (b) How many letters did the first word have?
- (c) What was the first word (probably)?



- (d) What did the message (probably) say?
- 6. (a) Where does the double-it cipher take **cat**?

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

7. (a) What happens if you encrypt a message more than once? For instance, is there a simpler way of describing the "triple-ripple cipher" other than "first shift by 5, then shift by 8, then shift by 5 again"?

(b) Is the triple-ripple cipher three times as secure as a regular shift cipher?

Mini-Exam2

Name: _____

- 1. (a) Convert "miniexam" into numbers.
- (b) What vowel goes with the number 2?
- 2. (a) What consonant goes with the number 32?
- (b) What consonant goes with the number -2?
- (c) What vowel goes with the number 437,578,381? (four hundred thirty seven million five hundred seventy eight thousand three hundred eighty one)
- 3. (a) Where does the shift by 2 cipher take **miniexam**?
- (b) What was shifted by 2 to get **IEJEVWEV**?
- 4. (a) What shift turns **miniexam** into **PUQUOZIP**?
- (b) What shift turns **miniexam** into **VIWIEGAV**? (harder, explain your answer)



- 5. A shift cipher was applied to a short English sentence to get **A** OW **POLIVEIC** (a) How many words did the sentence have before it was encrypted?
- (b) How many letters did the first word have?
- (c) What was the first word (probably)?



- (d) What did the message (probably) say?
- 6. (a) Where does the double-it cipher take **bat**?

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

7. (a) What happens if you encrypt a message more than once? For instance, is there a simpler way of describing the "triple-ripple cipher" other than "first shift by 5, then shift by 9, then shift by 5 again"?

(b) Is the triple-ripple cipher three times as secure as a regular shift cipher?