Mini-Exam 2 Name: _____ 1. Convert "subtly" into numbers. 1 21 $\mathbf{2}$ 203 ZB С 194 Y D X F 18 $\mathbf{5}$ W G 2176V Η Т J 2. What vowel goes with each number? 16 $\overline{7}$ Κ S (b) 1025 (c) -5 (d) -78 (a) 4 15R 8 \mathbf{L} N MQ P 14 9 13101211

3.	What	consonant go	bes with	each number?		
(a)	2		(b) 22		(c) -2	(d) -22

4. (a) Where does the shift by 3 cipher take **subtly**?

(b) What was shifted by 3 to get **RUBX**?

5. (a) What shift turns **subtly** into **JIRKBP**?

(b) What shift turns **subtly** into **MUVNFS**? (harder, explain your answer)

- 6. A shift cipher was applied to a short English sentence to get A veidt kxu zup.
- (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) Figure out all the vowels: A vEIdt k×U zUp
- (e) What are some (at least three) possibly keys that would work to encrypt the vowels?
- (f) Any guess on the third word?
- (g) What did the message (probably) say?

- 7. (a) Where does the double-it cipher take cat?
- (b) The double-it cipher was applied to an English word to get TANNX . What was the original word?



Mini-Exam 2 Name: _____ 1. Convert "betray" into numbers. 1 21 $\mathbf{2}$ 203 ZB С 194 Y D X F 18 $\mathbf{5}$ W G 2176V Η Т J 2. What vowel goes with each number? 16 $\overline{7}$ Κ \mathbf{S} (b) 1022 (c) -2 (d) -22 (a) 2 15R 8 \mathbf{L} $|_{N} M$ Q P 14 9 13101211

3.	What	consonant goes	with each r	number?	
(a)	4	(b)	25	(c) -3	(d) -30

4. (a) Where does the shift by 2 cipher take **betray**?

(b) What was shifted by 2 to get **RTIB**?

5. (a) What shift turns betray into **QOJGIN**?

(b) What shift turns **betray** into **MEFCAK**? (harder, explain your answer)

- 6. A shift cipher was applied to a short English sentence to get E nuy caup fsa xaddura.(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) Figure out all the vowels: E nUy cAUp fsA xAddUrA
- (e) What are some (at least three) possibly keys that would work to encrypt the vowels?
- (f) Any guess on the fourth word?
- (g) What did the message (probably) say?

- 7. (a) Where does the double-it cipher take dog?
- (b) The double-it cipher was applied to an English word to get DUDDX . What was the original word?



Mini-Exam 2 Name: _____ 1. Convert "tricky" into numbers. 1 21 $\mathbf{2}$ 203 ZB С 194 Υ D X F 18 $\mathbf{5}$ W G 2176V E Η Т J 2. What vowel goes with each number? 16 $\overline{7}$ K \mathbf{S} (a) 3 (b) 88 (c) -3 (d) -88 15R 8 \mathbf{L} N MQ P 14 9 13101211

3.	What consona	nt goes with each	h number?	
(a)	8	(b) 28	(c) -8	(d) -28

4. (a) Where does the shift by 4 cipher take tricky?

(b) What was shifted by 4 to get **QOHPD**?

5. (a) What shift turns tricky into LJETBQ ?

(b) What shift turns tricky into **RPIZHW**? (harder, explain your answer)

- 6. A shift cipher was applied to a short English sentence to get **O eqir hvi ilez**.
- (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) Figure out all the vowels: O EqIr hvI ILEz
- (e) What are some (at least three) possibly keys that would work to encrypt the vowels?
- (f) Any guess on the third word?
- (g) What did the message (probably) say?

- 7. (a) Where does the double-it cipher take **cow**?
- (b) The double-it cipher was applied to an English word to get ${\sf LPOOD}$. What was the original word?

