

Cipher Challenge 2:

This message was encrypted using columnar transposition ciphers. There are 4 different width sizes used and a blank line signals a change to a new width.

The first had a width of 5 columns and x's were used to fill out the last row so that it made a perfect rectangle. The ciphertext is written down the columns and the plaintext can be read across the rows: **If we are separated me**

```
i f w e a
r e s e p
a r a t e
d m e x x
```

The message is continued in the next block of ciphertext which was encrypted using a width of 8.

```
e t a t t h e s
o u t h e n d o
f t h e y e l l
o w b r i d g e
a t t w x x x x
```

The plaintext is: **et at the south end of the yellow bridge at tw**

The next block of the message was encrypted using a width of 13. Note that this time the rectangle was not filled in with x's making it harder to determine the width.

```
o i w i l l s t o r e t h
e d o c u m e n t s i n o
u r b o x a t o n e o h o
n e m a r k
```

The plaintext is: **o. I will store our documents in the box at one oh one Mark**

The final block of the message was encrypted using a width of 21.

```
e t s t r e e t i n t h e e v e n t o f c
a p t u r e d e s t r o y t h i s m e s s
a g e a n d a w a i t f u r t h e r i n s
t r u c t i o n s
```

The plaintext is: **et Street. In the event of capture destroy this message and await further instructions.**

Putting it all together we get the following plaintext :

If we are separated meet at the south end of the yellow bridge at two. I will store our documents in the box at one oh one Market Street. In the event of capture destroy this message and await further instructions.

Note:

- The address 101 Market Street is for the Federal Reserve Bank in San Francisco. The documents are stored in a safe deposit box at the bank. The “yellow bridge” referred to is the Golden Gate Bridge.
- Did you notice the column widths 5,8,13,21 form a Fibonacci sequence?