

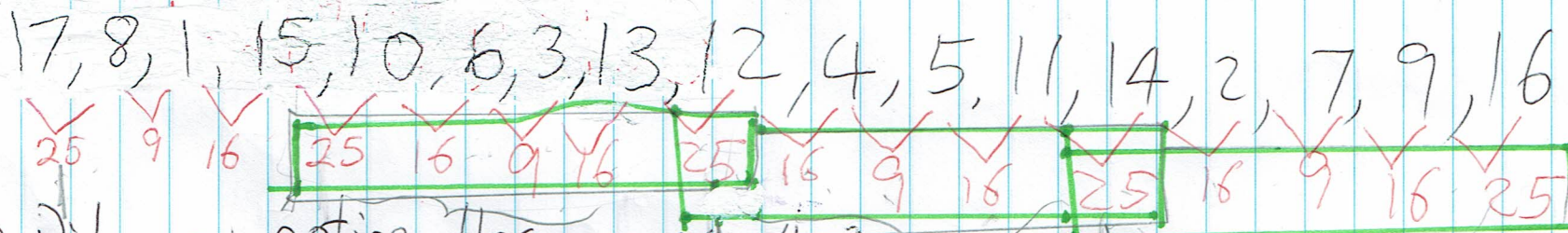
# Sticky Numbers

$n^{\text{th}}$  Term:

Triangular numbers

1	3	6	10	15	21	28	36	45	55	66	78	$T_n = \frac{n(n+1)}{2}$
	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	4	9	16	25	36	49	64	81	100	121	144	
	$2^2$	$3^2$	$4^2$	$5^2$	$6^2$	$7^2$	$8^2$	$9^2$	$10^2$	$11^2$	$12^2$	

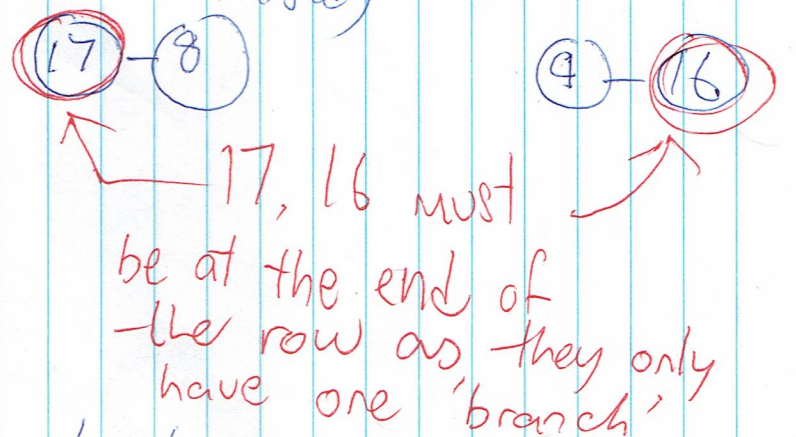
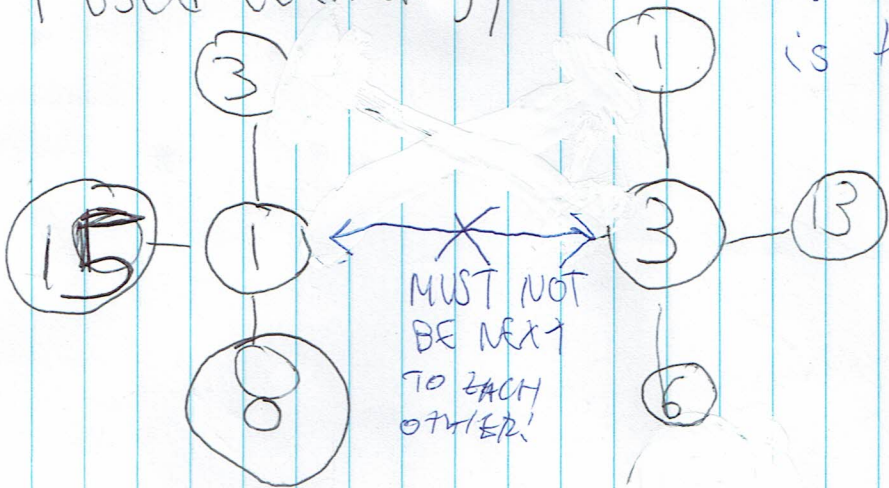
For the numbers 1 to 17, I have an arrangement as shown:



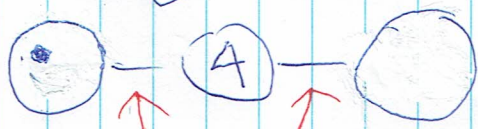
① Did you notice there are no 4s? I think it is because 4 is quite small. The same to 36, but the fact that it is too big.

② The pattern is shown repeating in the green boxes. Note that 25, 16, 9, 16, 25 is palendromic

③ I used a strategy that is described here. This proves that ~~the~~ my solution is the only solution (the other one is just reversed)



otherwise, there will be fewer numbers to form a row



any number that ~~has~~ 2 'branches' to form two square

Refer to excel file