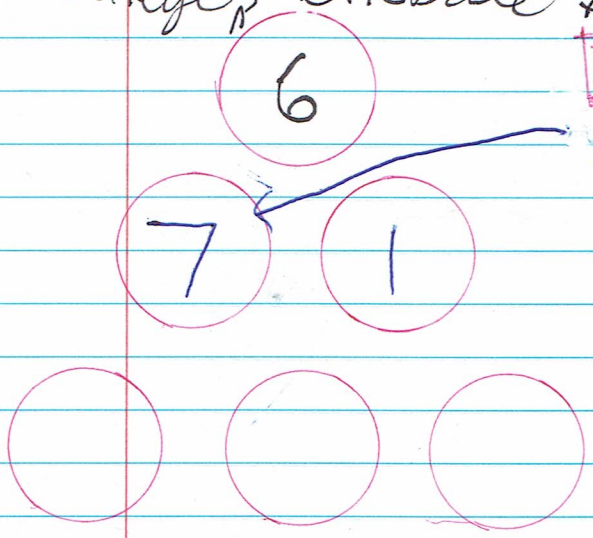
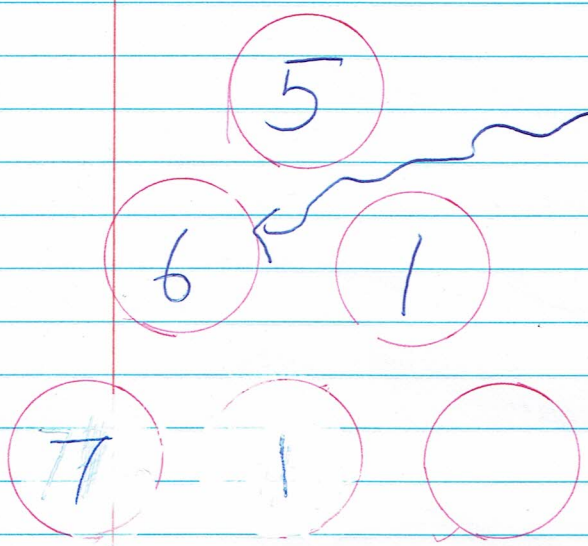
Primary 5G Ong Ci Thi Minh Ngoc Kelvin Grove State College, Brisbane Australia

Title: Positive Differences



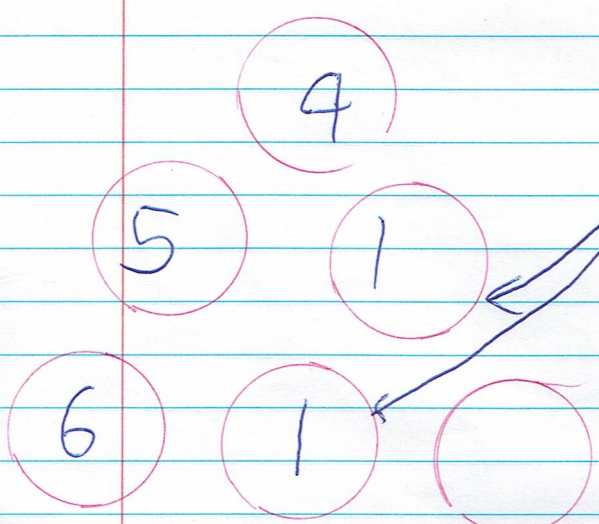
7 is not part of 1 to 6

6 ~~has~~ must be on the bottom row



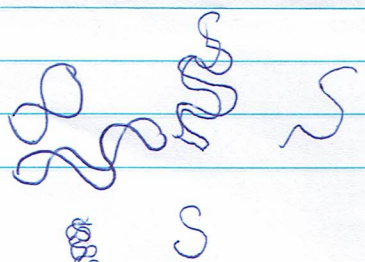
7 is not part of 1 to 6. Also, you repeat 1

5 cannot be on top



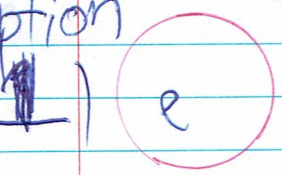
you repeated the 1!

4 cannot be on top

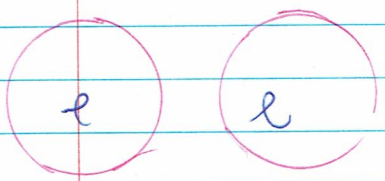


Analyse: Even and odd

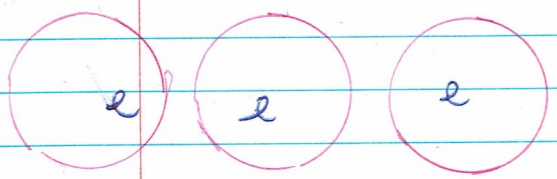
Option (1)



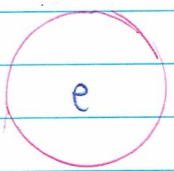
even − even = even
odd − odd = even
even − odd = odd



← too many evens! 6!!

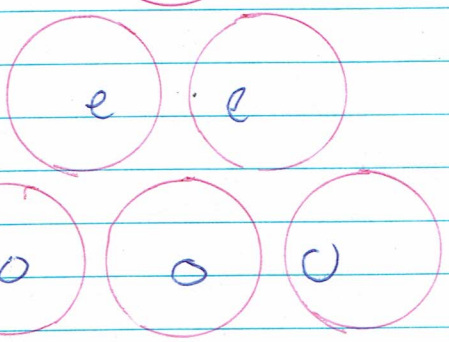


Option (2)



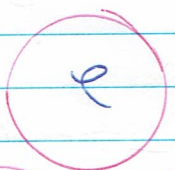
1	2	3	4	5	6
o	e	o	e	o	e

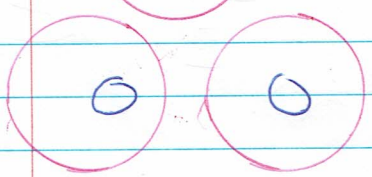
There are three odds, three evens



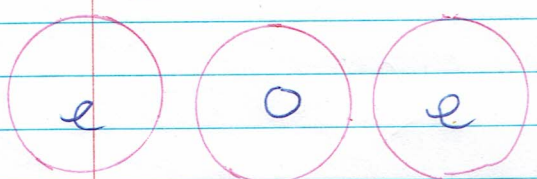
may works
but 6 is even and has to be on the bottom row.

Option (3)



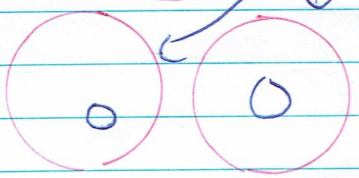


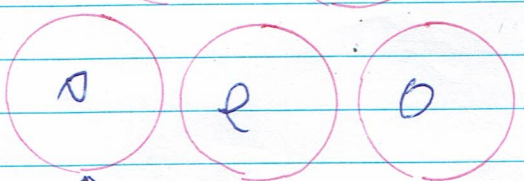
← may work



Option (4)

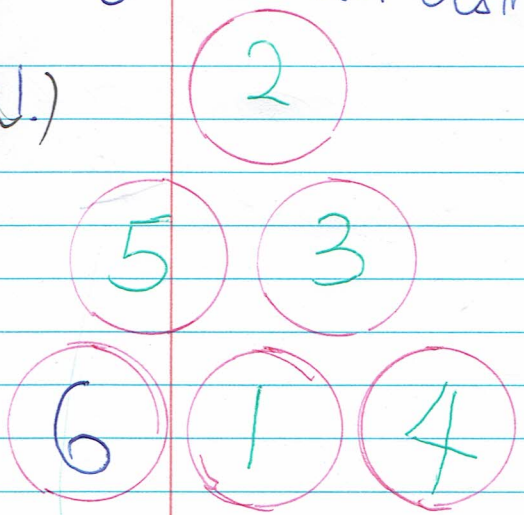
too many odds! 4!





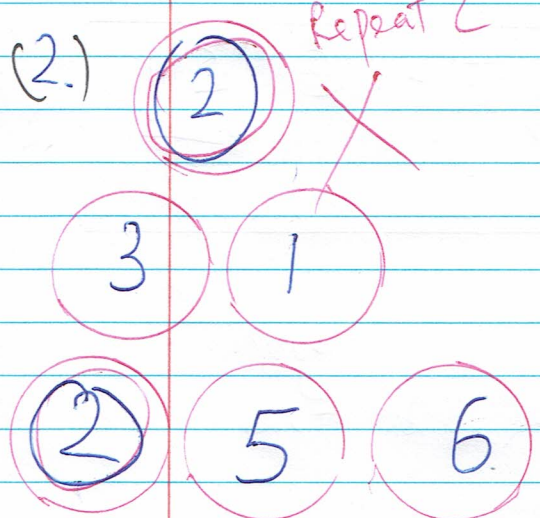
Try solution using option (3) (6 at the bottom)

(1.)



✓

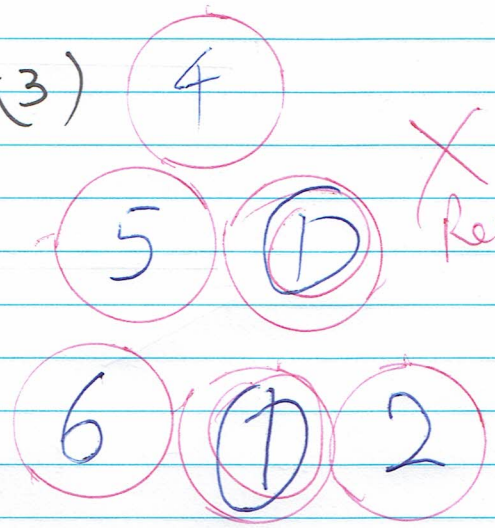
(2.)



Repeat 2

X

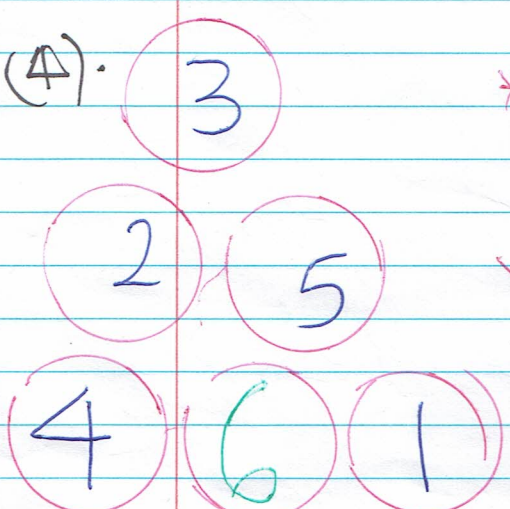
(3)



X

Repeat 1

(4).



✓

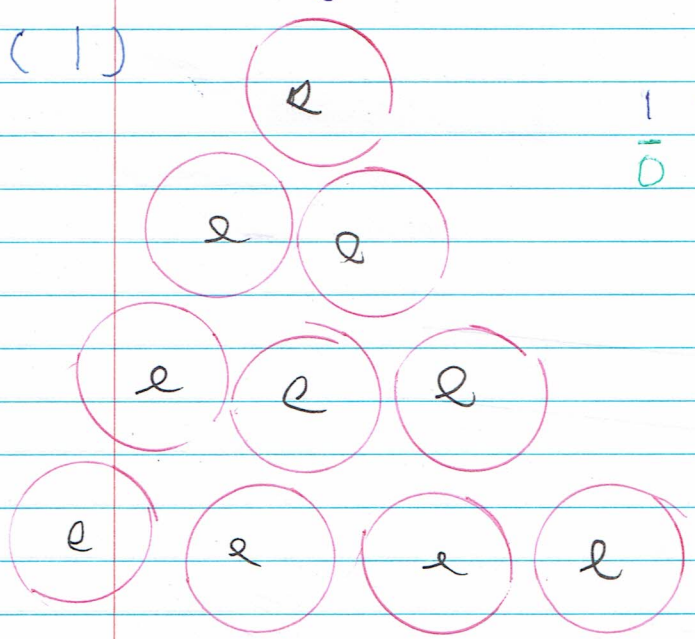
*I have found two solutions.
(1) and (4)

Title: Positive Differences - Extension

e - e = e
o - o = e
e - o = o

Analyse even and odds

(1)

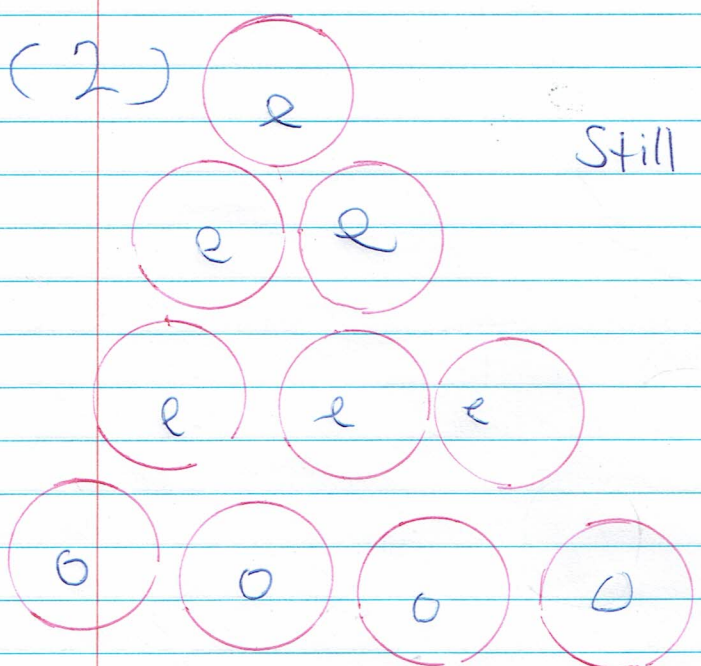


1 2 3 4 5 6 7 8 9 10
O E O E O E O E O E

5 evens, 5 odds within 1 to 10

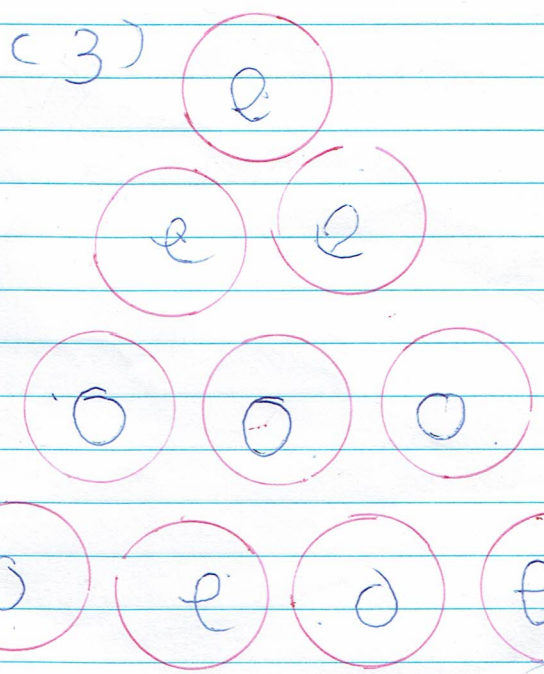
Too MANY EVENS! (10)

(2)



Still to many evens.

(3)



ok → Seven 5 odds

e e

(4)

e

e e

e e o

e e e o

too many evens!

Try solution using option (3)
largest no. 10 has to be on the bottom row

I found this solution!

5

2 7

3 1 8

6 9 10 2

P5/5