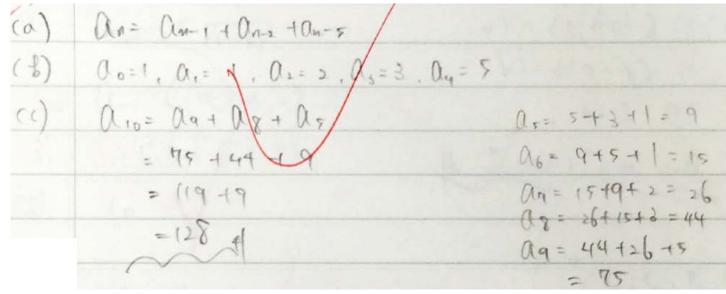
## 答案僅供參考

第1題.

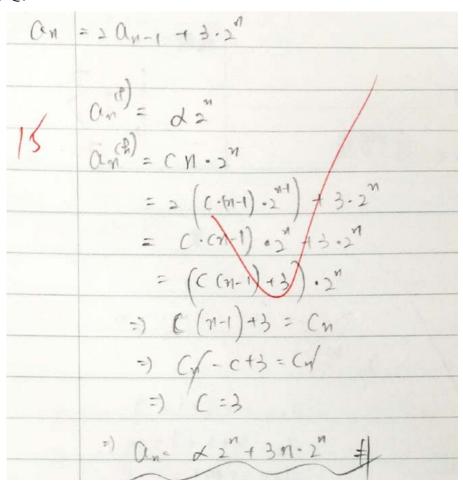


## 第2題.

- (a)  $a_n = a_{n-1} + a_{n-2} + a_{n-3}$
- (b)  $a_0=1$ ,  $a_1=1$ ,  $a_2=2$
- (c)  $a_8 = a_7 + a_6 + a_5 = 81$

第3題.

第4題.



第5題.

解法 1:

解法 2:

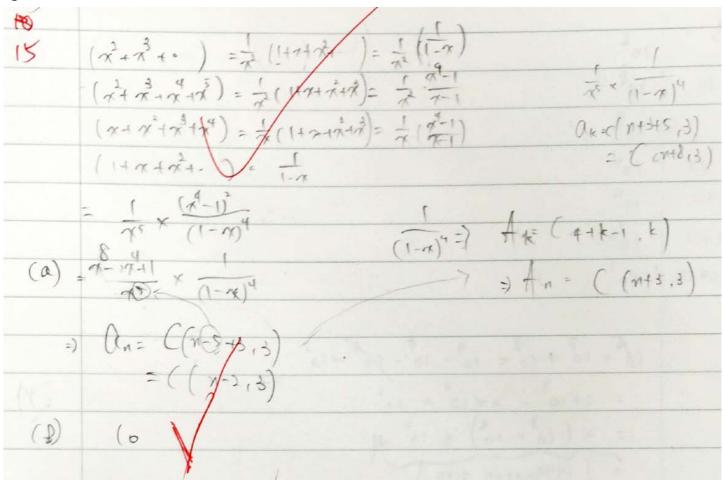
解法 3:

$$x_{1} + x_{2} + x_{3} + x_{4} + x_{5} = 5$$

$$C_{4}^{9} - C_{1}^{5} \times 5$$

$$= 126 - x^{2} = 101_{4}$$

第6題.



第7題.

## 題目補充

- 1.數字不可重複使用
- 2.分別解出(1)、(2)、(3)

8	数字不可量/复的状况下) Satisfy only (1)
pool	9876 = 6!
15	satisfy only (2)
	$34= C_4^8 \times 4! + C_4^4 \times 4!$
	satisfy only (3)
	======================================
	satisfy (1) and (2)
	987634 = 4!
	satisfy (2) and (3)
	$3412 = C_4 \times 4! + C_2^2 \times 2!$
	satisfy () and (3)
	987612 = 41
	satisfy (1) and (2) and (3)
	987634 - 12 = 2!
	X