

Worksheet 2015-9EC-00003(2)

- (1) (i) Write the next four numbers in each sequence.
(ii) Describe the pattern in words.
(iii) Determine the 100th term of each sequence.

(a) 84 ; 184 ; 284 ; 384 ; _____

(b) 1 ; 8 ; 27 ; 64 ; _____

(c) 4,75 ; 4,81 ; 4,87 ; 4,93 ; _____

(d) $\frac{3}{64}$; $\frac{3}{32}$; $\frac{3}{16}$; $\frac{3}{8}$; _____

(e) -133 ; -137 ; -141 ; -145 ; _____

(2) Complete the following tables and write the relation between x and y :

(a)

x	1	2	3			13	16	21		
y	18	25	32	53	67				767	837

(b)

x	5	6	7	9	12	20	26			
y	-14	-16	-18					-70	-82	-226

(c)

x	1	3	5	7		11			35	52
y	5	15	25		45		95	150		

(3) The third, fourth and fifth terms of a sequence are respectively 57 ; 54 and 51.

- (a) Write the first and second terms of the sequence.
- (b) Determine the general term of the sequence.
- (c) Determine the difference between T_{80} and T_{81} .
- (d) What will the first negative term in the sequence be?
