

Worksheet 8

Writing Formulae

1 Let T stand for the n th number in each pattern.

(a)

n	1	2	3	4	5
T	3	6	9	12	15

$$T = 3n$$

(b)

n	1	2	3	4	5
T	5	9	13	17	21

$$T = 4n + 1$$

(c)

n	1	2	3	4	5
T	5	7	9	11	13

$$T = 2n + 3$$

(d)

n	1	2	3	4	5
T	2	7	12	17	22

$$T = 5n - 3$$

2 The formula for the n th number in a sequence is:

$$2n + 4$$

(a) Find the 4th number.

12

(b) Find the 15th number.

34

(c) Find the 100th number.

204

(d) Find the sum of the first 10 numbers in the sequence.

6, 8, 10, 12, 14, 16, 18, 20, 22, 24

150