Sequences : nth term

Question 1: Find the nth term for each of the following sequences

(a) 5, 8, 11, 14, ...

(b) 9, 14, 19, 24, ...

(c) 1, 3, 5, 7, ...

(d) 10, 14, 18, 22, ...

(e) 2, 7, 12, 17, ...

(f) 3, 9, 15, 21, ...

(g) 11, 31, 51, 71, ...

(h) 20, 23, 26, 29, ...

(i) 1, 7, 13, 19, ...

(j) 100, 125, 150, 175, ...

(k) 13, 22, 31, 40, ...

(l) 1.5, 2, 2.5, 3, ...

Question 2: Find the nth term for each of the following sequences

(a) 10, 7, 4, 1, ...

(b) 6, 4, 2, 0, ...

(c) 9, 4, -1, -6, ...

(d) 20, 10, 0, -10, ...

(e) 5, -1, -7, -13, ...

(f) 5, 4, 3, 2, ...

(g) -6, -13, -20, -27, ...

(h) -10, -13, -16, -19, ...

(i) 2.5, 2, 1.5, 1, ...

Question 3: Find the 100th term for each sequence in Questions 1 and 2.

Question 4: The nth term for some sequences are given below.
Find the first 5 terms for each sequence.

(a) 5n + 3

(b) 2n + 9

(c) 3n – 2

(d) 10n – 6

(e) 9n + 10

(f) n + 8

(g) −7n + 20

(h) 50 – 5n

(i) 3.5n + 4

Question 5:

(a) Is 205 a term in the sequence 1, 5, 9, 13, ... ?
(b) Is 200 a term in the sequence 4, 10, 16, 22, ... ?
(c) Is 1000 a term in the sequence 50, 65, 80, 95, ... ?
(d) Is 999 a term in the sequence 11, 20, 29, 38, ... ?
(e) Is 458 a term in the sequence 5, 12, 19, 26, ... ?