Number sequences worksheet

1) Obtain the general term of these sequences

a) 1, 7, 13, 19, . . .

b) 100, 95, 90, . . .

2) Write the arithmetic sequence using the given general term.

a) $a_n = 15 - 5(n - 1)$

b) $a_n = \dfrac{12 + 8(n + 1)}{2}$

3) Write next two terms of given A.P. -3, -5, -7,-9......Also give its general term.

4) The nth term of an AP is 7 – 4n. Find its common difference

5) Find the common difference and 15th term of an arithmetic progression: 125, 120, 115, 110, . . . Also give its general term.

6) Obtain the general term of the given sequence. Also find the 17th term of the arithmetic progression: 4, 9, 14, . . .

7) How many terms are there in the following Arithmetic progression? -16, -12, -8...............16

8) Obtain the general term of the given sequence. Also find the 14th term of the arithmetic progression: −7, −6 ½ , −6, . . .

Answers

1. a) 6n-5
   b) 105-5n
2. a) 15,10,5,…
   b) 14, 18, 22,…
3. General term = -1-2n
4. d=-4
5. term 15=55 ; General term = 130-5n
6. term 17=84 ; General term = 5n-1
7. n=9
8. General term = 0.5n-7.5 ; term 14 = -0.5