Arithmetic Progressions : Worksheet -7

1. Find the sum of the following APs:

(i) 2, 7, 12, . . ., to 10 terms.

(ii) –37, –33, –29, . . ., to 12 terms.

(iii) 0.6, 1.7, 2.8, . . ., to 100 terms.

2. Find the sums given below :

(i) 34 + 32 + 30 + . . . + 10

(ii) –5 + (–8) + (–11) + . . . + (–230)

3. In an AP:

(i) given $a = 7$, $a_{13} = 35$, find d and S_{13}.

(ii) given $a_3 = 15$, $S_{10} = 125$, find d and a_{10}.

(iii) given $a = 2$, $d = 8$, $S_n = 90$, find n and a_n.

(iv) given $a_n = 4$, $d = 2$, $S_n = -14$, find n and a.

(v) given $l = 28$, $S = 144$, and there are total 9 terms. Find a.

4. The first term of an AP is 5, the last term is 45 and the sum is 400. Find the number of terms and the common difference.

5. Find the sum of first 51 terms of an AP whose second and third terms are 14 and 18 respectively.