

# Arithmetic Progression Worksheet-1

## Question 1.

Fill in the blanks in the following table, given that  $a$  is the first term,  $d$  the common difference and the  $n^{\text{th}}$  term of the A.P.

	$a$	$d$	$n$	$a_n$
(i)	1	3	10	?
(ii)	12	-2	?	0
(iii)	?	3	10	47
(iv)	- 18.9	2.5	.....	3.6
(v)	3.5	0	105	.....

## Question 2.

Which of the following sequences are A. P'S?

Write down their common difference.

(a) 5, 10, 15, 20,25.....

(b) 2, 2, 2, 2,2.....

(c) 2, 4, 8, 16,32.....

(d) 3, 14, 25, 36.....

(e) 11, 8, 5, 2, ...

## Question 3

Write next two terms of given A.P. (a) -3, -5, -7,-9.....

## Question 4

The sum of the 4th and 8th terms of an AP is 24 and the sum of the 6th and the 10th

terms is 44. Find the first three terms of the AP

**Question 5****True and False statement**

- a) 10th term of A.P. 10, 20, 30, 40..... is 100
- b) 20th term of A.P. whose first term = 10, common difference = 3 is 67
- c) The number of bacteria in a certain food item after each second forms an AP. when they double in every second
- d) The amount of money in the account of Varun at the end of every year forms an AP when Rs 1000 is deposited at simple interest of 10% per annum
- e) The fee charged every month by a school from Classes I to XII forms an AP, when the monthly fee for Class I is Rs 250, and it increases by Rs 50 for the next higher class.
- f) The fee charged from a student every month by a school for the whole session forms an AP when the monthly fee is Rs 400.