

## Chapter-Arithmetic Progressions

### Question bank

Q1.

What is the common difference of an A.P. in which  $a_{21} - a_7 = 84$ ?

Q2.

Find the common difference of the Arithmetic Progression (A.P.)

$$\frac{1}{a}, \frac{3-a}{3a}, \frac{3-2a}{3a}, \dots (a \neq 0)$$

Q3.

How many two digits numbers are divisible by 3?

Q4.

For what value of  $k$  will  $k + 9$ ,  $2k - 1$  and  $2k + 7$  are the consecutive terms of an A.P.?

Q5.

In an AP, if the common difference ( $d$ )  $= -4$  and the seventh term ( $a_7$ ) is 4, then find the first term.

Q6.

Find the 9th term from the end (towards the first term) of the A.P. 5, 9, 13, ....., 185.

Q7.

Find the sum of first 8 multiples of 3.

Q8.

Which term of the A.P. 8, 14, 20, 26, ... will be 72 more than its 41<sup>st</sup> term?

Q9.

How many terms of the A.P. 27, 24, 21, ... should be taken so that their sum is zero?

Q10.

The first term of an A.P. is 5, the last term is 45 and the sum of all its terms is 400. Find the number of terms and the common difference of the A.P.