

**Arithmetic Progression**  
**CREATIVE QUESTION**

1. Check whether 301 is a term of the list of numbers 5, 11, 17, 23.....
2. How many two-digit numbers are divisible by 3?
3. Find the 11<sup>th</sup> term from the last term (towards the first term) of the AP: 10, 7, 4,.....,-62
4. A sum of ₹1000 is invested at 8% simple interest per year. Calculate the interest at the end of each year. Does these interests form an A.P? If so, find the interest at the end of 30 years making use of this fact.
5. In a flower bed, there are 23 rose plants in the first row, 21 in the second, 19 in the third, and so on. There are 5 rose plants in the last row. How many rows are there in the flower bed?
6. Check whether -150 is a term of an A.P : 11,8,5,2.....
7. Find the 31st term of an AP whose 11th term is 38 and the 16th term is 73.
8. An AP consists of 50 terms of which 3rd term is 12 and the last term is 106. Find the 29<sup>th</sup> term.
9. How many three digit numbers are divisible by 7?
10. How many multiples of 4 lie between 10 and 250?
11. Find the 20th term from the last term of the AP: 3, 8, 13,.....253
12. For what value of n, are the nth terms of two AP's : 63,65,67..... and 3,10,17.....equal?
13. Subba Rao started work in 1995 at an annual salary of ₹5000 and received an increment of ₹200 each year. In which year did his income reach ₹7 000.
14. Ramkali saved ₹5 in the first week of a year and then increased her weekly savings by ₹1.75. If in the n<sup>th</sup> week, her weekly savings become ₹20.75. find n.
15. Find the sum of the first 40 positive integers divisible by 6.
16. Find the sum of the first 15 multiples of 8.
17. Find the sum of the odd numbers between 0 and 50.
18. Which term of the AP: 121, 117, 113,..... is its negative term?
19. In an A.P given l= 28, S= 144 and there are total 9 terms. Find a.
20. A sum of ₹700 is to be used to give seven cash prizes to students of a school for their overall academic performance. If each prize is ₹20 less than its preceding prize, find the value of each of the prizes.