

Q1. Check whether 301 is a term of the AP : 5 , 11 , 17 , 23 ,

Ans. No

Q2. Check whether -150 is a term of the AP : 11 , 8 , 5 , 2 ,

Ans. No

Q3. Check whether 184 is a term of the AP : 3 , 7 , 11 ,

Ans. No

Q4. Check whether 124 is a term of the AP : 4 , 9 , 14 , 19 ,

Ans. Yes

Q5. Find the number of terms in each of the following AP :

(i) 7 , 10 , 13 , , 43 . (ii) $-1, -\frac{5}{6}, -\frac{2}{3}, -\frac{1}{2}, \dots, \frac{10}{3}$. Ans. (i) 13 (ii) 27

(iii) 7 , 13 , 19 , , 205 . (iv) $18, 15\frac{1}{2}, 13, \dots, -47$. Ans. (iii) 34 (iv) 27

Q6. Find the 20th term from the last term of the AP : 3 , 8 , 13 , , 253 .

Ans. 158

Q7. Find the 8th term from the last term of the AP : 7 , 10 , 13 , , 184 .

Ans. 163

Q8. Find the 10th term from the end of the AP : 8 , 10 , 12 , , 126 .

Ans. 158

Q9. Find the 9th term from the end of the AP : 5 , 9 , 13 , , 185 .

Ans. 153

Q10. Find the 11th term from the last of the AP : 10 , 7 , 4 , , -62 .

Ans. -32

Q11. Determine the AP whose 3rd term is 5 and the 7th term is 9 .

Ans. AP : 3 , 4 , 5 ,

Q12. Determine the AP whose 7th term is 32 and the 13th term is 62 .

Ans. AP : 2 , 7 , 12 , ...

Q13. Find the 40th term of the AP whose 6th term is 19 and 17th term is 41 .

Ans. 87

Q14. Find the 31st term of the AP whose 11th term is 38 and 16th term is 73 .

Ans. 178

Q15. An AP consists of 50 terms of which 3rd term is 12 and the last term is 106. Find the 29th term. Ans. 64Q16. An AP consists of 9 terms of which 4th term is 7 and the last term is 17. Find the 15th term. Ans. 29Q17. If the 3rd and 9th terms of the AP are 4 and -8 respectively, which term of this AP is zero ?Ans. 5th termQ18. If the 2nd and 7th terms of the AP are 18 and 3 respectively, which term of this AP is -81 ?Ans. 35th termQ19. The 17th term of an AP exceeds its 10th term by 7. Find the common difference.

Ans. d = 1

Q20. Determine the AP whose 3rd term is 16 and the 7th term exceeds the 5th term by 12. Ans. 4 , 10 , 16 ,Q21. Determine the AP whose 2nd term is 10 and the 6th term exceeds the 4th term by 12. Ans. 4 , 10 , 16 ,Q22. Determine the AP whose 8th term is 37 and the 15th term is 15 more than the 12th term. Ans. 2 , 7 , 12 ,Q23. The sum of 4th and 8th terms of an AP is 24 and the sum of 6th and 10th terms is 44. Find the AP.

Ans. -13 , -8 , -3 ,

Q24. The sum of 5th and 9th terms of an AP is 72 and the sum of 7th and 12th terms is 97. Find the AP.

Ans. 6 , 11 , 16 ,

