$\underset{\text { anf academy }}{\text { angerinits chool }}$

Answer the following:

1. Find the $12^{\text {th }}, 24^{\text {th }}$ and nth term of the A.P given by $9,13,17,21, \ldots$. [ 53, 101, 4n+5]
2. Show that the sequence $9,12,15,18$,.. is an A.P.
3. The first term of an A.P is $\mathbf{- 7}$ and the common difference 5 . Find its $\mathbf{1 8}^{\text {th }}$ term and general term.
[78, 5n-12]
4. Determine the $10^{\text {th }}$ term from the end of the A.P 4, 9, 14, ... 254. [ 209]
5. Which term of the sequence $-1,3,7,11, \ldots$ is 95 ?
[25]
6. Which term of the sequence $4,9,14, \ldots$. Is 124 ?
7. How many terms are there in the sequence $3,6,9,12, \ldots .111$ ?
8. Find the middle term of the A.P 7, 13, 19,... 241.
[121. 127]
9. Consider the A.P 2, 5, $8,11, \ldots .302$. Show that twice of the middle term of the above A.P is equal to the sum of its first and last term.
10. If the $8^{\text {th }}$ term of an A.P is 31 and the $15^{\text {th }}$ term is 16 more than the $11^{\text {th }}$ term. Find the A.P. [3, 7, 11....]
11. Which term of the arithmetic progression $5,15,25$,.. will be 130 more than its $\mathbf{3 1}{ }^{\text {st }}$ term? [44]
12. If the $10^{\text {th }}$ term of an A.P is 52 and $17^{\text {th }}$ term is 20 more than the $13^{\text {th }}$ term, find the A.P.
[7, 12, 17,...]
13. Is 184 a term of the sequence $3,7,11, \ldots$. ?
14. The $10^{\text {th }}$ term of an A.P is 52 and $16^{\text {th }}$ term is 82 . Find the $32^{\text {nd }}$ term and the general term.
15. The sum of $5^{\text {th }}$ and $9^{\text {th }}$ terms of an A.P is 72 and the sum of $7^{\text {th }}$ and $12^{\text {th }}$ terms is 97. Find the A.P. $\quad[11,16,21, \ldots .$.
16. Find the number of integers between $\mathbf{5 0}$ and $\mathbf{5 0 0}$ which are divisible by 7.
