1) Write the arithmetic sequence got by adding 3 to multiples of 7 ?

Write the algebraic expression of this sequence?
Is 2000 a term of this sequence?
2) Difference of first terms of two arithmetic sequences with same common difference is 10. (a) What is the difference between second term of these sequences?
(b) What is the difference between $\mathrm{n}^{\text {th }}$ term of these sequences?
(c) Find the difference between the sum of first n terms these sequences?
3) Algebraic expression of sum of terms of an arithmetic sequence is $3 n^{2}+4 n$.
(a) Find the first term?
(b) What is the algebraic expression of the sequence?
(c) Fin the $20^{\text {th }}$ term?
4) Algebraic expression of an arithmetic sequence is $4 n+3$. Is 44 a term of this sequence? Why?
5) In the arithmetic sequence $6,10,14, \ldots .$.
(a) How much is larger $15^{\text {th }}$ term than $10^{\text {th }}$ term?
(b) Find the term which is 32 more than $20^{\text {th }}$ term?
6) In an arithmetic sequence with common difference 6 , ninth term is zero. (
a) Find $8^{\text {th }}$ term and $10^{\text {th }}$ term?
(b) Find the sum of first 17 terms?
7) In an arithmetic sequence, $16^{\text {th }}$ term is 60 and $26^{\text {th }}$ term is 90 .
(a) Find the difference between these terms?
(b) Find the common difference?
(c) Write the sequence?
8) (a) Write the sequence of numbers of half of natural numbers?
(b) Write the sequence of integers of the above sequence?
(c) What is the position number of the number 23 in the first sequence?
(d) Find the sum of first 50 terms of the first sequence?
9) $8 n+11$ is an arithmetic sequence.
(a) Find the common difference?
(b) Find the remainder leave on dividing each term of this sequence by common difference? (c) Is 11 a term of this sequence? Why?
10) In the arithmetic sequence $1 / 2,4 / 3,13 / 6$, $\qquad$
(a) Find the common difference?
(b) Find the first integer of this sequence?
11) Algebraic expression of an arithmetic sequence is $6 n+1$.
(a) Write the sequence?
(b) Find the remainder leaving on dividing each term by 6?
(c) Write the algebraic expression of sequence of natural numbers which leave remainder 2 on division by 6 ?
12) Sum of first 15 terms of an arithmetic sequence is 300 .
(a) Find the $8^{\text {th }}$ term?
(b) If first term is 6 , what is common difference?
(c) Write the algebraic expression?
13) Algebraic expression of an arithmetic sequence is $5 n+3$.
(a) Find $20^{\text {th }}$ term?
(b) Find sum of first 39 terms?
14) In the arithmetic sequence $20,16,12, \ldots \ldots$.....
(a) Find common difference?
(b) How many positive terms are there in this sequence?
(c) Find the first negative number of this sequence?
(d) Find its position number?
15) Write the sequence of even perfect squares? Is this an arithmetic sequence?
16) Algebraic expression of an arithmetic sequence is $8 \mathrm{n}+5$.
(a) Find common difference?
(b) What is the difference between the smallest 4 digit number and the largest 3 digit number of this sequence?
17) In the arithmetic sequence $4,6,8, \ldots . . . .$.
(a) Find the $5^{\text {th }}$ term?
(b) What is the ratio between $1^{\text {st }}$ and $3^{\text {rd }}$ terms?
(c) What is the ratio between $2^{\text {nd }}$ and $5^{\text {th }}$ terms?
(d) Which term makes the same ratio with the $10^{\text {th }}$ term?
18) (a) What is the first number larger than 200 which leaves remainder 3 on division by 7 ?
(b) How many such numbers are there in between 200 and 400?
(c) Find the sum of these numbers?
19) Find the sum of all three digit multiples of 9 ?
20) 4

812
162024
28323640
$\qquad$
(a) Write next two lines this pattern? (b) Find the first and last number of $11^{\text {th }}$ row?

