Notes of Online class

Session 1

Look at the arrangement of numbers $2, 4, 6, 8 \cdots$
This is the sequence of even numbers.
Next number or the term of the sequence can be written easily by noting the rule of the sequence.
Number sequences are the arrangement of numbers in an order.
$1, 3, 5, 7, 9 \cdots$ is a sequence of numbers.We call this the sequence of odd numbers.
Some students are curious on learing numerical sequences. Try yourself to continue the sequences given below with your own logic
$1, 4, 9, 16, 25, \cdots$
$2, 5, 10, 17, 26 \cdots$
$1, 11, 21, 31 \cdots$
$6, `11, 16, 21 \cdots$

Examples

1) Consider the sequence $2, 4, 6, 8 \cdots$

   a) Write two more terms of this sequence

   b) Which is he smallest two digit term of this sequence?

   c) Which is the largest two digit term of this sequence

   d) Can the sum of any two terms of this sequence 75?

Answers

a) $10, 12$

b) 10

c) 98

d) Terms are even numbers. The sum of two even numbers cannot be an odd number. So 75cannot be the sum

2) Consider the sequence $1, 3, 5, 7 \cdots$

   a) Write next two more terms of this sequence

   b) Which is the smallest two digit term of this sequence?

   c) Which is the largest two digit term of this sequence

   d) Can the sum of any two terms of this sequence 75

Answers

a) $9, 11$

b) 11

c) 99

d) No .The terms are odd numbers. the sum of two odd numbers cannot be an odd number. .

3) a) Write the sequence of numbers in which 1 comes in the one's place

b) which is the largest two digit term of this sequence?

c) How many numbers are there in this sequence below 100?

4) Look at the picture . Squares are made by joining match sticks.

a) Write the number of squares in each line as a sequence

b) Write the number of match sticks in each line as a sequence

c) How many match sticks are used to make next line

Answers

a) $1, 2, 3, 4 \cdots$

b) $4, 7, 10 \cdots$

c) 16

5) Find out the rule behind the formation of the sequence $1, 4.9, 16 \cdots$

a) Write next three terms

b) What is the tenth term of this sequence

c) Is 900 a term of this sequence ? If it is ,what is its position?

d) Is 1000a term of this sequence? Why?

Answers

a) $25, 36, 49$

b) $10^2 = 100$

c) 900 is its 30 th term

d) 1000 is not a perfect sequare. So it cannot be a term

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