

01 If you save Rs. 1 today, Rs. 2 the next day, Rs. 3 the succeeding day and so on, what will be your total savings in 365 days ?

Your solution here:

02 Find the sum to n terms of the series $1 + (1 + 2) + (1 + 2 + 3) + (1 + 2 + 3 + 4) + \dots$

Your solution here:

03

A bacteria gives birth to two new bacteria in each second and the life span of each bacteria is 5 seconds. The process of the reproduction is continuous until the death of the bacteria. Initially there is one newly born bacteria at time $t = 0$, find the total number of live bacteria just after 10 seconds.

Your solution here:

04

Find the sum of n terms of $1^2 + (1^2 + 2^2) + (1^2 + 2^2 + 3^2) + (1^2 + 2^2 + 3^2 + 4^2) + \dots$ from that find the sum of the first 10 terms.

Your solution here:

05

The sum of an infinite geometric series is 162 and the sum of its first n terms is 160. The inverse of its common ratio is an integer, then how many values of the common ratio(r) are possible ?

Your solution here:

06

One side of an equilateral triangle is 24 cm. The mid-points of its sides are joined to form another triangle whose mid points are in turn joined to form still another triangle. This process continues indefinitely. Find the sum of the perimeters of all the triangles.

Your solution here: