

Assignment: Lab book Review - Appendices A

Q Derive the formula for the following summation series

$$\sum_{i=m}^n c = f(c, n, m)$$

In other words, What is the closed form formula in terms of the constant c , n , and m ?

given summation: $\sum_{i=m}^n c$

Where, c is a constant
 i is index, running from m to n

So, number of terms
 $= n - m + 1$

the sum is simply c
added to itself for each
value of i from m to n .

$(n-m)$ gives difference between 2 indices.
We also need to add 1, as include both m, n

Now, we can express sum

as: $\sum_{i=m}^n c = c(n-m+1)$

Also, we have $f(c, n, m) = c(n-m+1)$

So, the final formula or closed form expression

is: $\sum_{i=m}^n c = c(n-m+1)$

↑
use this formula can get
direct sum of series.

This works when m less than
or equal to n