SEQUENCE FORMULA

value of nth term

increment

$$t_n = a + (n-1)d$$

term you're stopping at

value of first term

SUM OF SERIES FORMULA

of terms

increment

$$S_n = \frac{n}{2}\left[2a + (n-1)d\right]$$

sum of n terms

value of 1st term

Series

~~SEQUENCE~~ FORMULA

# of terms

$$S_n = \frac{n}{2}\left[t_1 + t_1 + (n-1)d\right]$$

sum of n terms

OR

# of terms

$$S_n = \frac{n}{2}\left[t_1 + t_n\right] = \frac{n}{2}\left[2a + (n-1)d\right]$$