



$$\text{sum} = ((a_1 + a_n)) * n / 2 \quad \textcircled{1}$$

$$(a_1 + a_n) * (n/2) \quad \text{or} \quad ((a_1 + a_n) / 2) * n$$

for even n

Examples :

1 2 3 4 5 6


2 5 8 11


for odd n

Examples :

1 2 3 4 5


3 6 9 12 15


$$a_n = a_1 + (n-1) * d \quad \textcircled{2}$$

Example :

4 6 8 10 12

$$a_1 = 4$$

$$a_2 = 4 + 2$$

$$a_3 = 4 + 2 * 2$$

$$a_4 = 4 + 2 * 3$$

⋮

$$a_n = a_1 + (n-1) * d$$

$$\text{sum} = ((2a_1 + (n-1) * d) * n) / 2$$

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