

MON 3-10-08

P.47 Σ GIFT

$$\# \text{ terms} = 17 - 1 + 1 \\ = \underline{\underline{17}}$$

⑤ d) $6 + 10 + 14 + 18 + \dots + 70$

i) n^{th} (GENERAL) TERM

$$a_n = \underline{\underline{4n+2}}$$

ii) $\sum_{n=1}^{17} (4n+2)$

$$4n+2=70$$

$$4n=68$$

$$\frac{4}{4} \frac{68}{4}$$

$$n=17$$

$$S_f) 2 + 5 + 10 + 17 + \dots + 290$$

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3 5 7

i) n^{th} (GENERAL) TERM? $n^2 + 1$

ii) $\sum_{n=1}^{17} (n^2 + 1)$

$$n^2 + 1 = 290$$

$$n^2 = 289$$

$$n = 17$$

$$\sum_{n=0}^{16} (n+1)^2 + 1$$

1
4 } 3
9 } 5
16 } 7
25 } 9
36 } 11

THINK!

$$S_j) 1 - 3 + 5 - 7 + 9 - 11 + \dots + 49$$

i) GENERAL (n^{th}) TERM?

$$a_n = (-1)^{n+1} \cdot (2n-1)$$

$$ii) \sum_{n=1}^{25} (-1)^{n+1} \cdot (2n-1)$$

2 KEY
WORDS
ALTERNATING
ODD

4! "4 FACTORIAL"

$$4! = 4 \cdot 3 \cdot 2 \cdot 1$$

$$\underline{\underline{4! = 24}}$$

FORMAL DEFN

$$0! = 1$$

$$1! = 1$$

$$n! = n \cdot (n-1)!$$

$$1! = 1$$

$$2! = 2 \cdot 1! = 2 \cdot 1 = 2$$

$$3! = 3 \cdot 2! = 3 \cdot 2 \cdot 1 = 6$$

$$4! = 4 \cdot 3! = 4 \cdot 3 \cdot 2 \cdot 1 = 24$$

O.T.L.

3 EX.
ON
NSPIRE

• CORRECT TODAY'S O.T.L.

P.47 (Σ GIFT)

1-4 (A, C)

5-7 (a, c, e, g, i, ...)

B-G-R } 9-4 } a

↪ 30 POINT TEST THIS WEEK!