

① $\Rightarrow an^2 + bn + c$ نشیں دے اسی درجہ ۲

$\begin{matrix} 1 & 2 & 3 & 4 \\ +1 & +4 & +9 & +16 \\ +3 & +5 & +7 & +9 \end{matrix}$

 $\frac{3}{2}$ $\frac{1}{2}$ $\Rightarrow$ حد منفرستہ $\Rightarrow 0$

$$\frac{3}{2}n^2 + bn \Rightarrow \frac{3}{2} + b = 1 \Rightarrow \boxed{b = -\frac{1}{2}}$$

$$a_n = \frac{3}{2}n^2 - \frac{n}{2} \Rightarrow \text{مثلاً} \Rightarrow \frac{3}{2} \times 4^2 - \frac{4}{2} = 3 \times 4 - 1 = 9 - 1 = 8 \checkmark$$

$$\frac{3}{2} \times 100 - \frac{100}{2} = 150 - 50 = 100 \leftarrow \text{نشیں دے}$$

② $\Rightarrow an^2 + bn + c$

$\begin{matrix} 1 \Rightarrow 0 & +0 & +1 \\ 2 \Rightarrow 1 & +1 & +1 \\ 3 \Rightarrow 4 & +4 & +1 \\ 4 \Rightarrow 9 & +9 & +1 \end{matrix}$

 $\frac{1}{2}n^2 + bn \Rightarrow \frac{1}{2} \times 1 + b = \frac{1}{2} + b = 0$

$\boxed{b = -\frac{1}{2}}$

$$\frac{1}{2}n^2 - \frac{1}{2}n = 55$$

$$\left(\frac{n^2}{2} - \frac{n}{2} \right) = (55)$$

$$\frac{n(n-1)}{2} = 55 \Rightarrow n = 11$$

③ مجموعہ کل عدد ہاؤز ہاؤز کی زینٹی درجہ یازدہم

$\begin{matrix} 1 & 2 & 3 \\ +5 & +7 & +9 \\ +2 & +2 & \end{matrix}$

$$n^2 + bn \Rightarrow b = -4 \Rightarrow (11)^2 + (-4 \times 11) =$$

$$121 + 44 = 165$$

$\begin{matrix} 5 & 9 & 13 \\ +4 & +4 & \end{matrix}$

 $\Rightarrow fn + 1 \Rightarrow 44 + 1 = 45$

$\nearrow$ تعداد ہاؤز کی زینٹی

$$165 + 45 = \boxed{210} \checkmark$$

Subject : Year : Month : Date : دینا دھی

Q. 9, 9, 9, 9
 $+9 + 3 - 3$
 $-3 - 3 - 3$

$an^2 + bn + c$

$\Rightarrow \frac{-3}{1}n^2 + bn \Rightarrow \frac{-3}{1} \times 1^2 + b \times 1 = -9 + 1b = 9$

9

$3\left(\frac{-3}{1}\right) + \left(\omega \times \frac{V\omega}{1+\omega}\right) = \frac{-9}{1} + \frac{V\omega}{1} = \frac{99}{1} = 99$

$1b = 1\omega$

$b = V, \omega$

$V \frac{\omega}{1+\omega}$

$an^2 + bn + c \Rightarrow n^2 - n - 9$

$1b + c = -1 \Rightarrow B = -1$

$C = -9$

10

$a_n = an + b \Rightarrow d = \omega \Rightarrow a_n = 19 + (n-1)\omega$
 $a_1 = 19$ $\omega n + 11$

$n^2 - n - 9 = \omega n + 11 \Rightarrow n^2 - 4n - 20 \Rightarrow (n-9)(n+3)$

$n = 9 \checkmark$

$n = -3 \times$

$$a_n = \frac{(-1)^n}{n} \Rightarrow$$

نیزریند / لوچیتین

(4)

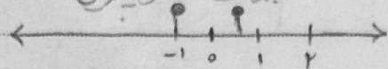
$$n=1 \Rightarrow \frac{-1}{1} = -1$$

$$n=2 \Rightarrow \frac{1}{2}$$

$$n=3 \Rightarrow \frac{-1}{3}$$

$$n=4 \Rightarrow \frac{1}{4}$$

نیزریند / لوچیتین



$$+ \frac{1}{4} - (-1) = \frac{1}{4} + \frac{2}{2} = \frac{3}{2}$$

اضداف طرند

$$b_p = (-3)^p - 21 = -27 - 21 = -48$$

(5)

$$-5n + 22 = -48 \Rightarrow -5n = -70 \Rightarrow 5n = 70 \Rightarrow n = 14$$

$$a_n + b \Rightarrow a_6 + b - (a_7 + b) =$$

(6)

$$a_1 + b - a_7 - b = 12 \Rightarrow a_7 = 12$$

$$a_4 = 2 \times a_7 = 24$$

$$24 - 2 = 22$$

$$a_1 = \frac{a_7}{3} = 4$$

$$a_1 = a_7 = 7 \quad a_3 = a_5 = 15 \quad b = -1 \Rightarrow -b = +1$$

(7)

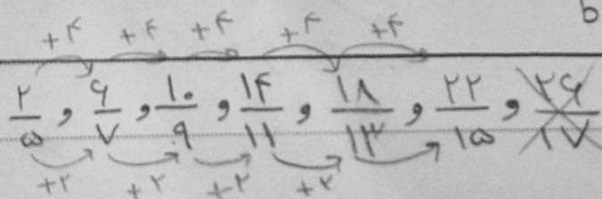
a_1
 $\downarrow$
 a_1

a_7

$$a_1 = b_1 \Rightarrow 4(-1) = b_1 \Rightarrow b_1 = -4$$

$$a_7 = b_7 \Rightarrow 7 \times 4 - 1 = 27 \Rightarrow b_7 = 27$$

$$b_n \Rightarrow 11n - 5$$



لوچیتین از 15

(8)

اجله

Sabnam

