

نام و نام خانوادگی: کلاس: شماره: پاسخنامه تشریحی تکلیف شماره: کلاس: نام و نام خانوادگی:

۱ شکل $\Rightarrow 1$
 ۲ شکل $\Rightarrow 0$
 ۳ شکل $\Rightarrow 1$
 ۴ شکل $\Rightarrow 2$

$C_1 = 2a$
 $b_1 = 2a + b$
 $a_1 = a + b + c$

$E = E_d + b$
 $a = 1, d \Rightarrow a = 1, d$
 $1, d n^2 - 0, d n + 0 \Rightarrow t_{10} = 100 - 10 + 0 = 90$

در نتیجه $a = 1, d = 0, c = 0$

۱ شکل $\Rightarrow 0$
 ۲ شکل $\Rightarrow 1$
 ۳ شکل $\Rightarrow 2$

$C_1 = 2a$
 $b_1 = 2a + b$
 $a_1 = a + b + c$

$1 = 2a \Rightarrow a = 0, d$
 $1 = 0, d + b \Rightarrow b = 1 - 0, d$
 $0 = 0, d - 0, d + c \Rightarrow c = 0$

$t_n = 0, d n^2 - 0, d n \Rightarrow 0, d n^2 - 0, d n = 0 \Rightarrow 0, d n(n-1) = 0 \Rightarrow n(n-1) = 0$
 $0 = 0, d \Rightarrow n = 1$

۱ شکل $\Rightarrow 0$
 ۲ شکل $\Rightarrow 1$
 ۳ شکل $\Rightarrow 2$

$a + b \Rightarrow 2n + 1 \Rightarrow 2n + 1 = 1 \Rightarrow n = 0$

$a + b \Rightarrow 2n - 1 \Rightarrow 2n - 1 = 1 \Rightarrow n = 1$

$\frac{1}{2} - (\frac{1}{2}) = \frac{2}{2}$

کوچکترین عدد

$(-3)^n - 7n \Rightarrow (-3)^n - 7n = -41$

$-3n + 22 = -41$
 $+3n = -41 + 22$
 $n = \frac{-19}{3} \Rightarrow n = -6,33$

کاملاً استبعاد

$$d = \frac{t_n - t_1}{n - 1} = \frac{12}{2} = 6$$

$$\begin{aligned} t_2 &= t_1 + d \\ t_3 &= t_1 + 2d \end{aligned} \Rightarrow t_1 + d - t_1 + d = 2d \Rightarrow 2d = 12 \Rightarrow d = 6$$

2

$$d = \frac{10 - 2}{2 - 1} = \frac{8}{1} = 8$$

$$\begin{aligned} t_2 &= t_1 + d \\ 2 &= 1 + 8 \end{aligned}$$

$$\begin{aligned} t_1 &= 2 \\ t_2 &= 2 + 8 = 10 \end{aligned}$$

$$b \Rightarrow 2, 11$$

$$t_n = 2 + (n-1)11$$

2

$$t_n = \frac{2}{2}, \frac{2}{3}, \frac{1}{9}, \frac{1}{11}, \dots \Rightarrow \frac{2}{2}, \frac{2}{3}, \frac{1}{9}, \frac{1}{11}, \frac{1}{13}, \frac{2}{15}, \frac{2}{17}$$

$d = 4$ (for $\frac{2}{2}$ to $\frac{2}{3}$)
 $d = 2$ (for $\frac{1}{9}$ to $\frac{1}{11}$)

$\frac{2}{2} > \frac{2}{3}$

2

$$t_n = 4, 9, 14, 19, \dots$$

$$\begin{aligned} C_1 &= -2 = 2a \Rightarrow a = -1 \\ C_1 &= 2a \\ 2 &= -2 + d \Rightarrow d = 4 \\ b_1 &= 2a + b \\ a_1 &= a + b + c \\ c &= 0 \end{aligned}$$

$$2A + dB \Rightarrow 2x - 1/d + d \cdot 1/d \Rightarrow -2/d + 2/d = 0$$

2

$$t_n = -9, -8, -7, \dots$$

$$\begin{aligned} 2 &= 2a \Rightarrow a = 1 \\ C_1 &= 2a \\ 2 &= 2 + b \Rightarrow b = 0 \\ b_1 &= 2a + b \\ a_1 &= a + b + c \\ c &= 0 \end{aligned}$$

$$d = \frac{21 - 3}{2 - 1} = \frac{18}{1} = 18$$

$$t_n = |n^2 - n - 9|$$

$$-9 = 1 + (-1) - 9$$

$$\begin{aligned} t_2 &= t_1 + d \\ 2 &= 1 + d \end{aligned}$$

$$25 + (n-1)d = 21 + dn = |n^2 - n - 9|$$

$$2V = |n^2 - 9n| \Rightarrow 2V = n(n-9)$$

$$2V = 2 \times 9 \Rightarrow n = 9$$

10