

نام و نام خانوادگی: مرویسین

$$\frac{a+a+d+a+b+a+d+a+e}{a+d+a+e+d+a+b+a+b+a+d} = \frac{1}{1} = \frac{2a+10d}{2a+12d} \Rightarrow 12a+12d = 2a+10d \quad -4$$

$$\frac{a+a+d+a+b+a+d+a+e}{a+d+a+e+d+a+b+a+b+a+d} = \frac{1}{1} = \frac{2a+10d}{2a+12d} \Rightarrow 12a+12d = 2a+10d \quad -4$$

$$1 \cdot a = -9 \Delta d \quad a = -9 \Delta d \quad \frac{dx}{dx} = \frac{a+d}{a} = \frac{-9 \Delta d + d}{-9 \Delta d} = \frac{-1 \Delta d}{-9 \Delta d} = \frac{1}{9}$$

$$t_9^r - t_5^r = (t_9 + t_5)(t_9 - t_5) = (\gamma a + \alpha d + \varepsilon d)(\varepsilon d)$$

$$a + (n-1)b = a + (n-2)d + 1\Delta \Rightarrow 3d + 1\Delta \Rightarrow d = \Delta$$

$$t_z = a + c_d \quad \frac{b_z^r - b_s^r}{b_z} = \frac{r_o(r_a + \varepsilon_o + r_o)}{a + r_o} = \frac{\varepsilon_o(a + r_o)}{a + r_o} = \underline{\underline{\varepsilon_o}}$$

$$\frac{1-1\sqrt{3}-1-\sqrt{3}}{1+1} = \frac{-1\sqrt{3}-\sqrt{3}}{1} = \underline{\underline{-2\sqrt{3}}}$$

$$\frac{r_n - r_{n-1}}{r_{n-1}} = \frac{r_n}{r_{n-1}} - 1 = \frac{1}{n} = \frac{1}{n-1} - \frac{1}{n-1} \quad a = r \quad r + (n-1) \left(\frac{1}{n-1} \right) = 1 \quad \text{①}$$

$$\frac{-12n+12}{r_{n-1}} = 9 \quad -12n+12 = 9n-9 \quad r_2 = r_n \quad n=1$$

$$a + (n-1)d + a + (n-1)d = a + r d + a + 19d \quad \therefore a + (n-1)d = 2a + \left(\frac{n}{2} - 1\right)d \quad -1.$$

[illegible]

$$n=4 \quad \text{rd} = \frac{1}{2} \alpha + \frac{1}{2} \delta d \Rightarrow \alpha = -1, \delta d$$

$$f_n = a + (n-1)d = -1 \times 8d + (n-1)d = 0 \quad (n-1)d = \frac{1 \times 8d}{-1}$$

$$n=1 \rightarrow a_2 + a_3 + a_4 = 4 \quad \text{کمترین}$$

$$n=2 \rightarrow a_3 + a_4 + a_5 = 0 \rightarrow a_5 - a_3 = -4$$

$$a_1 + a_5 - a_1 - 2d = -4 \rightarrow 2d = -4 \rightarrow d = -2$$

$$a_2 + a_3 + a_4 = 4 \rightarrow 3a_1 + d + 2d + 3d = 4 \rightarrow 3a_1 = 11 \rightarrow$$

$$a_1 = 4$$

$$a_{11} + a_1 = a_1 + a_1 + 10d + 10d$$

$$2a_1 + 20d = 2(4) + 20(-2) = -32$$

$$a_3 + a_{13} = a_1 + a_1$$

$$r^n - 1 + r^{2n} - r^2 = r(r^{n+1})$$

$$r^n - r^2 = r(r \times r^n) - r^2$$

$$r^n - r^2 \times r^n - r^2 = 0 \rightarrow r^2 = t$$

$$t^2 - 4t - 4 = 0 \rightarrow t = 2 \rightarrow r^2 = 2 \rightarrow n = 2$$

$$t = -1 \quad \text{عقبات}$$

$$\text{عقبات} \rightarrow \frac{r^2 - 1}{r^2 - 1} / \frac{r^{2+1}}{r^2 - 1} / \frac{r^{2(2)}}{r^2 - 1} = 24$$

$$a_n + a_{n+2} = a_3 + a_{11} \rightarrow n + n + 2 = 3 + 11$$

$$2n + 2 = 14 \rightarrow n = 6$$

$$a_1 = 3a_2 \rightarrow a_1 + 10d = 3(a_1 + 9d)$$

$$3a_1 + 10d = a_1 + 10d \rightarrow 2a_1 = -10d \rightarrow a_1 = -5d$$

$$a_t = 0 \rightarrow a_1 + (t-1)d = 0 \rightarrow td = 5d$$

$$t = 5$$

مجموع ۱۲ مضامین

مجموع ۵ صید اول

$$\overbrace{a_1 + a_2 + a_3 + a_4 + a_5}^{2a_3} = 2a_3$$

مجموع ۵ صید دوم

$$\overbrace{a_4 + a_5 + a_1 + a_2 + a_3}^{2a_1} = 2a_1$$

$$3 \times 2a_3 = 2a_1 \rightarrow 3a_3 = a_1 \quad \frac{a_2}{a_1} = \frac{3a_1}{a_1} = 3$$

$$3(a_1 + 2d) = a_1 + 4d \rightarrow 2a_1 = d$$

سوال ۹

$4n-3$ ، واسطی صای درج شصت و پنج صیدی 32 صیدی $4n-1$ است!

$$a_{4n-1} = \cancel{a_1}^2 + (4n-2)d = 32 \rightarrow (4n-2)d = 31 \rightarrow (2n-1)d = 15$$

واسطی n ، صیدی $n+1$ است!

$$a_{n+1} = \cancel{a_1}^2 + nd = 11 \rightarrow nd = 9$$

$$2nd - d = 15 \xrightarrow{nd=9} \begin{cases} d=3 \\ n=3 \end{cases}$$