

نام و نام خانوادگی: آرتین سیدزانی فر ... پاسخنامه تشریحی تکلیف شماره ۱۳ ... کلاس ... (مع) ...

$$t_1 = 10$$

$$t_r = 91 \rightarrow t_r = t_1 + 3d \rightarrow 91 = 10 + 3d \rightarrow 3d = 81$$

$$d = 27$$

$$t_{10} = 10 + 3 \times 27 = 81$$

$$n = 27$$

$$t_n = 10 + 3 \times 27 = 81$$

$$t_1 = 101$$

$$101, 101 + 11, 101 + 22, \dots, 997$$

$$\rightarrow \frac{997 - 101}{11} + 1 = 81$$

$$a_1 + a_2 + a_3 = 4$$

$$a_1 = 4$$

$$n=1 \rightarrow a_1 + a_2 + a_3 = 4$$

$$n=2 \rightarrow a_1 + a_2 + a_3 = 0$$

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

$$a_1 + a_2 = 4$$

$$a_1 + a_2 = 4$$

$$t_r = r^n - 1 = a_1 + rd$$

$$t_n = r^{n+1} = a_1 + Vd$$

$$t_{13} = r^{13} - 13 = a_1 + 13d$$

$$t_r + t_n + t_{13} =$$

$$r^n - 1 + r^{n+1} - 13 = 3 + 1 + 13 = 17$$

$$t_r + t_{13} = t_n + t_1$$

$$r^n - 1 + r^{13} - 13 = r^{n+1} + r \rightarrow r^n + r^{13} - r = r^{n+1} + r$$

$$r^n + r^{13} - r^{n+1} = r$$

$$r^n(1 + r^{13-n} - r) = r \rightarrow r^n = r \rightarrow n = 1$$

$$a_{12} - a_{10} = (a_1 + 11d) - (a_1 + 9d) = 2d = 5 \rightarrow d = \frac{5}{2}$$

$$a_{10} + a_{12} = a_1 + 11d + a_1 + 9d = 2a_1 + 20d = 25$$

$$a_{12} = a_1 + 12d = -\frac{25}{2} + 12 \times \frac{5}{2} = \frac{25}{2}$$

$$S_1 = \Delta \times \frac{a_1 + a_4}{2} = \Delta(a_1 + r d)$$

$$S_r = \Delta \times \frac{a_r + a_{10}}{2} = \Delta(a_1 + r d)$$

مجموع ۳ برابر
فقط اول است

$$S_1 = \frac{1}{3} S_r$$

$$\Delta(a_1 + r d) = \frac{\Delta}{3} (a_1 + r d)$$

$$a_1 + r d = \frac{1}{3} (a_1 + r d) \xrightarrow{\times 3}$$

$$3a_1 + 3rd = a_1 + r d \rightarrow 2a_1 = d \rightarrow a_r = a_1 + d = 2a_1$$

$$t_n = t_{n-r} + 1 \Delta \rightarrow t_n = t_{n-r} d + 1 \Delta$$

$$t_9 - t_5 = (t_9 + t_5)(t_9 - t_5) = r_0 t_v$$

$$\frac{t_9 - t_5}{t_v} = \frac{r_0 t_v}{t_1 + 4d} = \frac{r_0 t_v}{t_v} = r_0$$

$$t_r = t_1 + 1 \Delta$$

$$t_r = t_1 + r d$$

$$r d = 1 \Delta$$

$$d = \Delta$$

$$t_1 = r(1 - 4\sqrt{r}) = r - 12\sqrt{r}$$

$$t_{1r} = r + \sqrt{r}$$

$$t_{1r} = t_1 + 12d \rightarrow r + \sqrt{r} = r - 12\sqrt{r} + 12d \rightarrow 12d = 12\sqrt{r}$$

$$d = \sqrt{r}$$

$$t_1 = r, t_n = r^2$$

$$d = \frac{t_n - t_1}{(r_n - r) + 1} = \frac{r^2 - r}{r_n - r} = \frac{r_0}{r_n - r}$$

$$\frac{r_0 n}{r_n - r} = 9 \rightarrow r_0 n = 9(r_n - r)$$

$$4n = 11 \rightarrow n = 3$$

n+1 جمله = n جمله

$$t_1, t_{n+1}$$

$$r, 11, r^2$$

$$11 + 9 = r + 21$$

$$t_{n+1} = t_1 + (n+1-1)d$$

$$nd = 9 \rightarrow nd = \frac{r_0 n}{r_n - r} = 9$$

$$a_n + a_{n+r} = a_r + a_{1r}$$

$$t_n = a_1 + r d = r(a_1 + r d)$$

$$a_1 + r d = r a_1 + r d \rightarrow r a_1 = -r d$$

$$a_1 = -d$$

$$a_r = a_1 + d$$

$$a_r = -d + d = 0$$

$$a_r = 0$$