

نام و نام خانوادگی نمره امتحان پاسخنامه تشریحی تکلیف شماره کلاس

$$t_1 = F_0$$

$$t_r = t_1 + r d = 41 \rightarrow r d = 21 \rightarrow \boxed{d = 7}$$

$$a_n = F_0 + (n-1)d$$

$$F_{10} = F_0 + 9d = 41 \rightarrow F_0 + 63 = 41 \rightarrow F_0 = -22 \rightarrow \boxed{n = 25}$$

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$$100 \leq 7n + 3 \leq 1000 \rightarrow 97 \leq 7n \leq 997 \rightarrow 13.8 \leq n \leq 142$$

$$n = 140, 141, 142 \rightarrow n = 141 \rightarrow 101$$

$$n = 142 \rightarrow 108 \rightarrow \boxed{n = 141}$$

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$$\begin{aligned} a_{n+1} &= a_1 + nd \rightarrow a_1 + nd \\ a_{n+2} &= a_1 + (n+1)d \rightarrow a_1 + nd + d \\ a_{n+3} &= a_1 + (n+2)d \rightarrow a_1 + nd + 2d \end{aligned} \left\{ \begin{aligned} &\Rightarrow r a_1 + r n d + r d = -4n + 12 \\ &x(a_1 + nd + d) = x(-2n + 4) \\ &a_1 + nd + d = -2n + 4 \rightarrow \boxed{d = -2}, a_1 - 2 = 4 \rightarrow \boxed{a_1 = 6} \end{aligned} \right.$$

$$a_{10} + a_8 = a_1 + 9d + a_1 + 7d = 2a_1 + 16d = 12 - 32 = \boxed{-20}$$

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$$t_r = t_1 + r d = r^x - 1$$

$$t_n = t_1 + n d = r^{x+1} - 1$$

$$t_{10} = t_1 + 9d = r^{10} - 1 \rightarrow r^{x+1} - r^x - 1 = r^x(r - 1) - r^x + 1 = r^{10} - 1$$

$$\left. \begin{aligned} x=2 &\rightarrow r^2 - 1 = r^2 - 1 \rightarrow t_2 = 1 \\ x=3 &\rightarrow r^3 - 1 = r^3 - 1 \rightarrow t_3 = 1 \\ x=4 &\rightarrow r^4 - 1 = r^4 - 1 \rightarrow t_4 = 1 \end{aligned} \right\} \Rightarrow \boxed{x=2}$$

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$$t_{10} - t_0 = 9d = 9 \rightarrow d = 1$$

$$t_{10} + t_0 = r t_1 + r^2 d = 10 \rightarrow r t_1 = 10 \rightarrow t_1 = 10/r$$

$$t_{11} = t_1 + r d = 10/r + 1 = 11 \rightarrow \boxed{r = 10}$$

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$$t_1 + t_r + t_v + t_f + t_a = \frac{1}{f} (t_u + t_v + t_f + t_a + t_{10})$$

$$r(a t_1 + 10d) = \frac{1}{f} (a t_1 + r a d) \rightarrow 1 a t_1 + r a d = a t_1 + r a d \rightarrow 10 t_1 = a d \rightarrow d = r t_1$$

$$\frac{t_r}{t_1} = \frac{t_1 + d}{t_1} = \frac{r t_1}{t_1} = r$$

(u)

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$$t_n = t_{n-1} + 1a$$

$$n = r \rightarrow t_r = t_1 + 1a \rightarrow t_r = t_1 + r d \rightarrow r d = 1a \rightarrow d = a$$

$$t_q = t_a + r d \rightarrow t_a + r_0 \rightarrow (t_a + r_0) r - t_a r = t_a r + F_0 r + F_0 t_a - t_a r = F_0 (1 + t_a)$$

$$t_v = t_a + r d \rightarrow t_a + 1a$$

$$\frac{F_0 (1 + t_a)}{t_a + r_0} = [F_0]$$

(u)

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$$d = \frac{b-a}{n+1} \rightarrow d = \frac{r + \sqrt{r} - (r - 1\sqrt{r})}{1r + 1} = \frac{1\sqrt{r}}{1r} = \sqrt{r}$$

(u)

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$$d = \frac{r(r-1)}{r(n-1)+1} = \frac{r_0}{r(n-1)} = \frac{r \times 1a}{r(rn-1)} = \frac{1a}{rn-1}$$

$$a_{n+1} = r + n d \rightarrow 11 = r + n \left(\frac{1a}{rn-1} \right) \rightarrow 9 = \frac{1a n}{rn-1} \rightarrow 1a n - 9 = 1a n \rightarrow r n = 9$$

[n=r]

(u)

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$$\left. \begin{aligned} a_n &= a_1 + (n-1)d \\ a_{n+r} &= a_1 + (n+r)d \\ n d + r d \end{aligned} \right\} \Rightarrow \begin{aligned} r a_1 + r n d + r d &= a_1 + r d + a_1 + 14d \\ (r n + r) d &= 14d \\ r n + r &= 14 \rightarrow r n = 14 \rightarrow n = 1 \end{aligned}$$

(u)

$$a_n = a_1 + (n-1)d$$

$$\frac{n}{r} = a_1 + \left(\frac{n}{r} - 1 \right) d$$

$$a_1 + v d = r (a_1 + r d) \rightarrow a_1 + v d = r a_1 + 9d$$

$$r a_1 = -r d \rightarrow [a_1 = -d]$$

$\frac{d}{dr} \frac{1}{d} \rightarrow \frac{1}{r^2}$

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