

$$\left. \begin{array}{l} a_1 = 10 \\ a_r = 41 \end{array} \right\} d = \frac{a_r - a_1}{r - 1} = \frac{31}{12} = \boxed{V}$$

$$10 + (n-1)V = 121 \rightarrow Vn = 11V \rightarrow n = \boxed{12}$$

$$a_n = Vn + 10 \rightarrow 10 + 12V = 121 \Rightarrow$$

$$9V = 111 \Rightarrow V = \frac{111}{9} = 12.33 \dots$$

$$n = 1, 2, 3, 4, 5, \dots, 12$$

$$\boxed{12.33}$$

$$a_{n+1} + a_{n+2} + a_{n+3} = 4n + 1$$

$$\downarrow n=1 \rightarrow a_1 + a_2 + a_3 = 4, n=2 \rightarrow a_2 + a_3 + a_4 = 6$$

$$\rightarrow a_2 + 3d = 6 \rightarrow a_2 = 6 - 3d$$

$$a_1 + 4d = 4$$

$$\rightarrow 10 + 4d = 4 \rightarrow d = -1.5 \rightarrow a = 4$$

$$a_n + a_{12} = 12a + 12d = 12 - 12 = \boxed{-12}$$

$$a_{12} - a_n = a_n - a_2 \Rightarrow 12 - a_n = a_n - 10 \Rightarrow 22 = 2a_n \Rightarrow a_n = 11$$

$$12 - 11 = 1 \Rightarrow d = 1$$

$$y = 12, y = 11 \Rightarrow x = 1$$

$$12 - 11 = 1 \Rightarrow x = 1$$

$$a_{12} - a_1 = 11 \Rightarrow d = \frac{a_{12} - a_1}{12 - 1} = \frac{11}{11} = 1$$

$$a_{12} + a_1 = 21$$

$$10 + 11d = 21 \rightarrow 11d = 11 \rightarrow d = 1$$

$$a_{12} = 10 + 11d = 21$$

$$S_0 = \frac{1}{1+r} S_1$$

$$\frac{a_1}{a_0} = \frac{a+d}{a} = \frac{1+r}{1} = 1+r$$

$$S_1 = \frac{1}{1+r} (1+r)a + d = a + \frac{d}{1+r}$$

$$S_2 = \frac{1}{1+r} (1+r)(a+d) + d = a + 2d$$

$$t_n = t_{n-1} + \frac{1}{1+r} \Rightarrow \frac{t_n - t_1}{1} = d = \frac{10}{1+r} = 10$$

$$t_0 = t_1 + d$$

$$t_1 = t_0 + r$$

$$t_1 - t_0 = (t_1 - t_0) + (t_1 + t_0) = r \cdot t_0 + 10$$

$$t_1 = t_0 + r$$

$$d = \frac{1+r}{1+r} - \frac{1}{1+r} = \frac{1+r-1}{1+r} = \frac{r}{1+r}$$

$$d = \frac{b-a}{n+1} = \frac{10-1}{10-1} = \frac{9}{9} = 1$$

$$1+d \cdot n = 11 \Rightarrow a + r \cdot n = 11 \Rightarrow 1 + 1 \cdot n = 11 \Rightarrow n = 10$$

$$a_n + a_{n+1} = a_1 + a_2$$

$$n + n + r = 1 \Rightarrow n = 1$$

$$a_1 + a_2 = 1 + 1 + r = 2 + r$$

$$a + r \cdot d = 1(a + r \cdot d)$$

$$-1a + r \cdot d \rightarrow d = -1$$

$$a_n = a + (n-1)d = 0$$

$$-a - a(n-1) = 0$$

$$a(1-n+1) = 0$$

$$a(2-n) = 0$$

$$a = 0 \rightarrow \text{X}$$

$$1-n = 0 \rightarrow n = 1$$