

$$t_n = \underbrace{a_0}_{+\varepsilon} \cup \underbrace{a_1}_{+\varepsilon} \cup \underbrace{a_2}_{+\varepsilon} \cup \dots \quad \boxed{t_n = \varepsilon n + 1}$$

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الف

$$t_{10} = \varepsilon a_{10} + 1 = \boxed{11}$$

ب

$$t_n = s_0 | a_0 | \varepsilon_0 | a_1 | \dots \quad S_n = \frac{n}{\varepsilon} (a + b) \Rightarrow \frac{1}{\varepsilon} (s_0 + \varepsilon n) = \boxed{2\varepsilon_0} \quad \text{جواب ۲}$$

$$t_n = \varepsilon n + 2 \quad t_{10} = \varepsilon_0 + 2 = \varepsilon_2$$

$$\text{مجموعه } = \{1, 2, \dots\} \quad S_n = \sum_{k=1}^n (10^k + 10^0) = \boxed{1128}$$

$$10^k + 10^0 = 10^k + 1 \quad 10^k + 1 = 10^k \quad 10^k + 1 = 10^k$$

$$1 + \sqrt{2}, 2, 2 - \sqrt{2}, \dots$$

$$t_n = 1 + \sqrt{2} + (n-1)(2 - \sqrt{2}) = 1 + \sqrt{2} + n - n\sqrt{2} + 2 - \sqrt{2} = \boxed{2 - n\sqrt{2} + 2\sqrt{2}}$$

$$d = 2 - \sqrt{2} - 2 \Rightarrow 1 - \sqrt{2} \quad t_{10} = 2 - 10\sqrt{2} + 2\sqrt{2} = 2 - 8\sqrt{2}$$

$$t_{10} = 2 - 10\sqrt{2} + 2\sqrt{2} = 2 - 8\sqrt{2}$$

$$t_{10} - t_{10} = 2d \Rightarrow 2(1 - \sqrt{2}) = 2 - 2\sqrt{2}$$

$$a_n = a^n, c \propto a^n, a^y \Rightarrow a^n, c \propto a^n, a^y$$

$$b_n = n a^n \quad x + d = y \quad n=1 \Rightarrow a^1 = 1a = 1$$

$$-x + d = y \quad x - y = y - y \Rightarrow x + y = 1 \quad t_{10} = 10 - 10 = 0$$

$$1 + a_0 \quad 1 + a_0 \quad 1 + a_0 \quad a^c = a^y \Rightarrow y = c$$

$$x=1 \quad y=c \quad \boxed{xy=c}$$

$$x_n - \varepsilon, x_n - 1, x_n, \dots \Rightarrow -\varepsilon, 0, \varepsilon, \dots$$

$$d = x_n - 1 - x_n + \varepsilon = \varepsilon$$

$$d = x_n - x_{n+1} = \varepsilon \Rightarrow x_{n+1} = \varepsilon \Rightarrow x_n = \varepsilon \Rightarrow n = \frac{1}{\varepsilon}$$

$$t_n = x_n - \varepsilon \Rightarrow t_{\varepsilon} = 1 - \varepsilon = \boxed{0}$$

$$a_n = \frac{c_0 d_0 v_0}{+r + r}$$

$$b_n = \frac{c_0 d_0 v_0}{+r + r}$$

$$[r, c] = 9 \quad \text{تحت } t_n = s_{n-1}$$

$$a_n = r_{n+1} \quad b_n = c_{n-1} \rightarrow c_{n-1} - 1 = 0 \quad \boxed{n \leq V}$$

$$L: r_{n+1} = f(1) \Rightarrow s_{n-1} \leq f(1) \Rightarrow s_n \leq f(1) \Rightarrow \boxed{n \leq V}$$

$$b_n = c_{n-1} = f(1) \Rightarrow c_n = f(1) \Rightarrow n = 1f$$

$$\text{تحت } t_v = f(1) - 1 = f(1)$$

$$a_1 + a_r + a_c = r(1) \Rightarrow r a_r = r(1) \Rightarrow a_r = V \quad \left. \begin{array}{l} c_0 + r + a_1 = r(1) \Rightarrow a_1 = r(1) - V \\ a_1 + a_c + a_d = 10d \Rightarrow c a_c = 10d \Rightarrow a_c = 10d \end{array} \right\}$$

$$a_1 + a_c + a_d = 10d \Rightarrow c a_c = 10d \Rightarrow a_c = 10d$$

$$\frac{a_c - a_r + a_1}{a_1} = \frac{10d - r + r(1)}{-r(1)} = \frac{V}{r(1)} = \boxed{-\frac{1}{2}}$$

$$a_1 + a_r + a_c = 10d \Rightarrow c a_r = 10d \Rightarrow a_r = d = a + d$$

$$a_e + a_d = r a + v d = r d \Rightarrow 10 + d = r d \Rightarrow d d = 10 \Rightarrow d = r$$

$$a + c = d \Rightarrow a = r \quad t_n = c_{n-1} \Rightarrow t_{10} = c_0 - 1 = \boxed{r(1)}$$

$$S_q = 9 S_c \Rightarrow \frac{9}{r} (r a + r d) = 9 \left(\frac{r a + r d}{r(a+d)} \right) \Rightarrow 9 a + 9 d = r a + r d - 9$$

$$\Rightarrow 9(a+d) = 9(r a + r d) \Rightarrow d = r a \Rightarrow \frac{a_r}{a_v} = \frac{a + r d}{a + r d} \Rightarrow \frac{r a}{r a} = \boxed{1}$$

$$a_v - a_1 = r d \Rightarrow r c = d r \Rightarrow c = r$$

$$a_n = r n + V \Rightarrow a_e = 14 \times V = r c$$

$$c n_9$$

$$, 1c$$

$$r x - c n = -10 = r d \Rightarrow d = -10$$

$$\& \text{ (b) } (n+r) = r \Rightarrow \boxed{n = F}$$

$$b_n = -a_n + r(1) \Rightarrow -a_n + r c = 10 \Rightarrow -a_n = -10 \Rightarrow n = 5$$