

$$t_n = 5, 9, 13, 17, \dots \Rightarrow t_n = 4n + 1 \quad (\text{الف})$$

$$t_{10} = 4(10) + 1 = \boxed{41} \quad (\text{ب})$$

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$$t_n = 9, 10, 11, 12, \dots \Rightarrow t_n = n + 9$$

$$S_n = \frac{n}{2} (2a_1 + (n-1)d) \Rightarrow S_{10} = 5(19 + (9)1) = \boxed{95} \quad (\text{الف})$$

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$$t_{19} + t_{20} + t_{31} + t_{32} \Rightarrow 118 + 122 + 124 + 130 = \boxed{494} \quad (\text{ب})$$

$$\Rightarrow t_{19} = 118, t_{20} = 122, t_{31} = 124, t_{32} = 130$$

$$1 + \sqrt{3}, 2, 3 - \sqrt{3}$$

$$2 - (1 + \sqrt{3}) = 1 - \sqrt{3}$$

$$(3 - \sqrt{3}) - 2 = 1 - \sqrt{3} \Rightarrow d = 1 - \sqrt{3}$$

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$$a_{13} = a_1 + 12d \Rightarrow a_1 + 12d - (a_1 + 12d) = 12d \Rightarrow 2(1 - \sqrt{3}) = \boxed{2 - 2\sqrt{3}}$$

$$a_{15} = a_1 + 14d$$

$$a_n = 2^x, 3 \times 2^x, 5^y \Rightarrow 2^x, 3^x 2^x, 5^y \Rightarrow 3^x 2^x - 2^x = 5^y - (3 \times 2^x)$$

$$b_n = x, 2, y \Rightarrow 2 - x = y - 2 \Rightarrow y = 4 - x$$

$$a_n \text{ ها} \Rightarrow 2^x (3 - 1) = 5^y - 3 \times 2^x \xrightarrow{3 \times 2^x \text{ با } 2^x \text{ ضرب}} 5^y = 2^x (2 + 3)$$

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$$\Rightarrow 5^y = 2^x \times 5 \Rightarrow y = x + 1$$

$$\left. \begin{array}{l} y = 4 - x \\ y = x + 1 \end{array} \right\} \Rightarrow 4 - x = x + 1 \Rightarrow 3 = 2x \Rightarrow x = 1.5, y = 4 - 1.5 = 2.5$$

$$\boxed{xy = 3.75}$$

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$$2x - 4, 2x - 1, 4x, \dots$$

$$4x - (2x - 1) = 2x - 1 - (2x - 4)$$

$$2x + 1 = 3 \Rightarrow 2x = 2 \Rightarrow x = 1$$

$$2x - 4 = -2$$

$$2x - 1 = 3$$

$$4x = 6$$

$$-2, 0, 2, \textcircled{4} \Rightarrow \text{جواب ۴}$$

$a_n = 3, 5, 7, \dots \Rightarrow r_{n+1} = 2$ $d = 2$ مشترک

$$b_n = 1, \omega, \wedge, \dots \Rightarrow r_{n-1}$$

$$\text{مترک} = 5, 11, 17 \Rightarrow 4n - 1$$

$$\gamma_{n-1} \leq \epsilon \Rightarrow n \leq V$$

$$a_{r_0} = r(r_0) + 1 = \infty$$

$$b_{p_0} = \mu(p_0) - 1 = 59$$

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$$\alpha_1 + \alpha_r + \alpha_p = 21 \Rightarrow 3\alpha_r = 21 \Rightarrow \alpha_r = 7$$

$$a_1 + a_\mu + a_\omega = 1.2 \Rightarrow 1a_\mu = 1.2 \Rightarrow a_\mu = 1.2$$

$$d \Rightarrow \Delta - V = 2A$$

$$\alpha_1 = V - \gamma \Lambda = -\gamma I$$

$$a_p - a_p + a_1 \Rightarrow 3\Delta - V + (-21) = V \Rightarrow a_1 = -21$$

$$\frac{1}{\lambda} = \left(\frac{1}{\lambda_1} - \frac{1}{\lambda_2} \right)$$

$$a_1 + a_r + a_p = 18 \Rightarrow 3a_r = 18 \Rightarrow a_r = 6$$

$$\alpha_F + \alpha_D = 1\omega \Rightarrow \alpha_F = 1\omega, \alpha_D = 0$$

$$a_1 = 0, a_r = \omega, a_v = 1_0 \Rightarrow a_n = \omega n - \omega \Rightarrow a_L = \omega(1_0) - \omega = \boxed{0}$$

$$S_q = q S_p \Rightarrow \frac{q}{p} (r_a + \lambda d) = q \times \frac{p}{p} (r_a + r_d)$$

$$\Rightarrow 9a + 14d = 25a + 25d \Rightarrow 14a = 11d \Rightarrow d = \frac{14}{11}a$$

$$\frac{\alpha_{v_0}}{\alpha_v} = \frac{\alpha + 19d}{\alpha + 4d} = \frac{19\alpha}{13d} = (7)$$

$$t_1 = 11, t_V = 3 \Rightarrow d_z \frac{\alpha_m - \alpha_n}{m - n} \Rightarrow d_z \frac{VF}{c} = f$$

11, 12, 19, (23) ¹¹⁻¹² 27, 31, 32

$$t_f$$

$$t_1 = 4 \text{ A}$$

$$\frac{3}{1}, \frac{3}{2}, \frac{2}{3}, \frac{2}{4}, \frac{1}{2}, \frac{1}{4}$$

در دنباله‌ی جدید ۴ اسلحه‌ی شباهی می‌توان قرار داد.