

$$t_n = an + b$$

$$t_n = a(n-1) + b$$

$$t_n : 5, 9, 13, 17, \dots$$

$$t_n = 4n + 1$$

(الف)

$$t_{10} = 4(10) + 1 = 41$$

(ب) $t_{10} = ?$

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$$t_n : 4, 10, 16, 22, \dots$$

$$a = \frac{10-4}{1-0} = 6$$

(الف)

$$S_n = \frac{n}{2} (2a + (n-1)d)$$

$$S_{10} = \frac{10}{2} (2(4) + (10-1)6) = 250$$

(ب)

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$$t_{18} = 4(18) + 2 = 74$$

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

$$t_{13}, t_{14}, t_{15}$$

$$t_{13} + 2(1 - \sqrt{3}) = t_{15} \rightarrow t_{15} - t_{13} = 2 - 2\sqrt{3}$$

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$$a_n = \omega^n$$

$$\omega^n \times \omega^n = \omega^{2n}$$

دوالی صوابی

$$b_n = n, r, y \rightarrow \frac{n+y}{2} = r \rightarrow n+y = 2r \rightarrow y = 2r - n$$

$$2n-1 = 2r-n$$

$$3n = 2r \rightarrow n = \frac{2r}{3}$$

$$t - \frac{a}{n} = \frac{1}{r} - \frac{a}{n} = \frac{1}{r} = y$$

$$ny = \frac{a}{r} \times \frac{1}{r} = \frac{ar}{9}$$

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

$$2n-1 + 2 = 4n \rightarrow 2n = 2 \rightarrow n = 1$$

$$2(\frac{1}{r}) - 4 = -12 \rightarrow 2(\frac{1}{r}) = -10 \rightarrow \frac{1}{r} = -5 \rightarrow r = -\frac{1}{5}$$

$$t_n = 2n - 4 \rightarrow t_5 = 2(5) - 4 = 6$$

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$$a_n = \frac{r}{r-1} \omega, V, \dots \rightarrow r(n+1) \rightarrow r(n+1) + 1 = \epsilon 1$$

$$b_n = r, \Delta, \Lambda, \dots \rightarrow r(n-1) - 1 = \Delta 9 \quad \omega, 11, 1V, \dots \rightarrow n \leq V$$

$$y_{n-1} \leq \epsilon 1 \rightarrow y_n \leq \epsilon 2 \rightarrow \boxed{n \leq V}$$

نصف من V

$$a_1 + a_r + a_p = r1 \quad a_1 + a_r + a_\Delta = 10\Delta \quad a_r - a_\Delta + a_1 = ? a_1$$

$$a_1 + a_1 + r\Delta + a_1 + \epsilon d - a_1 - r_1 - d - a_1 - r\Delta = r\Delta = 1\Delta \rightarrow \boxed{d = r\Delta}$$

$$a_1 + a_1 + r\Delta + a_1 + r(r\Delta) \Rightarrow 3a_1 + 1\Delta = r1 \rightarrow 3a_1 = r1 \rightarrow \boxed{a_1 = r1}$$

$$a_1 + r\Delta - a_1 - d + a_1$$

$$r1 + \Delta 9 + r1 - r\Delta - r1 = V$$

$$\frac{V}{r\Delta} = \frac{1}{\epsilon} \rightarrow \dots$$

$$a_1 + a_r + a_p = 10\Delta \quad a_r + a_\Delta = r\Delta \quad a_{10} = ?$$

$$a_1 + a_r + a_{10} + a_r + a_\Delta = r\Delta = \epsilon 0 \rightarrow a_0 = \frac{\epsilon 0}{r} \rightarrow r a_0 = \frac{\epsilon 0}{r} \times r$$

$$\rightarrow \boxed{a_{10} = \frac{10}{r}}$$

$$r s_r = s_a$$

$$\frac{a_{r0}}{a_v} = ?$$

$$r d = \frac{a_1}{d} + \frac{a_r}{d} + \dots$$

$$a_1 = r d$$

$$a_r = r d$$

$$a_p = \epsilon d$$

$$r \left(\frac{r}{r} (r a + r d) \right) = \frac{r}{r} (r a + r d)$$

$$1 r a + 1 r d = r a + r d$$

$$\rightarrow \frac{r a}{r} = \frac{1 r d}{r} \rightarrow a = r d$$

$$\frac{a_{r0}}{a_v} = \frac{r d}{1 r d} = \boxed{\frac{r1}{1}}$$

$$a_v = r d$$

$$a_{r0} = r d$$

$$a_1 = 11 \quad a_v = r\Delta \rightarrow \epsilon d = r\Delta \rightarrow \boxed{d = \epsilon} \quad a_r = 11 + \frac{r \times \epsilon}{r} = r r$$

$$r1, \frac{1}{r}, \frac{1}{r}, \frac{1}{r}, \dots, 1 r \quad d = \frac{r r - 1}{r} = -\Delta$$

$$\rightarrow \frac{1 r - r r}{n+1} = -\Delta \rightarrow -\Delta n - \Delta = -10 \quad a_n = \Delta \rightarrow \boxed{n=1}$$

$$\boxed{C(3)}$$