

الف) جمله عمومی دنباله $\leftarrow$ $E_{n+1} \checkmark$
ب) جمله ۱۰ام $\leftarrow$ $E_{10+1} = E_1 \checkmark$

$E_n = 5, 9, 13, 17$
 $+4 \quad +4 \quad +4$

الف) مجموع ۱۰ جمله اول $\leftarrow$ $E_{n+2} \rightarrow E = E_{10+2} = E_{12}$
 $\frac{10}{2} (E_2 + 9) = 240 \checkmark$
ب)

$E_n = 4, 10, 16, 22$
 $+6 \quad +6 \quad +6$

ب) $E_{11} + E_{10} + E_{11} + E_{12} =$
 $118 + 122 + 126 + 130 = 496 \checkmark$

$1 + \sqrt{3}, 2, 3 - \sqrt{3}, \dots \rightarrow d = 1 - \sqrt{3}$
 $E_{11} = (1 - \sqrt{3}) 11 + 2\sqrt{3} = 11 - 11\sqrt{3} + 2\sqrt{3} = 11 - 9\sqrt{3}$
 $E_{10} = (1 - \sqrt{3}) 10 + 2\sqrt{3} = 10 - 10\sqrt{3} + 2\sqrt{3} = 10 - 8\sqrt{3}$
 $10 - 8\sqrt{3} - (11 - 9\sqrt{3}) = 10 - 8\sqrt{3} - 11 + 9\sqrt{3} = -1 + \sqrt{3} \checkmark$

$a_n = a^x, 1^x, 2^x, 3^x, \dots$
 $b_n = x, 2, 4$
 $\left. \begin{array}{l} a_n = 1, 5, 25, 125, \dots \rightarrow d = 50 \\ b_n = 1, 2, 3, \dots \end{array} \right\} \rightarrow 1 \times 1 = 1 \checkmark$

$2x - 5, 2x - 1, 4x, \dots \rightarrow \frac{2x - 5 + 4x}{2} = 2x - 1 \rightarrow 2x - 1 = 2x - 5 \rightarrow$
 $4x = 4 \rightarrow x = 1$
 $2x \times \frac{1}{x} - 5, 2x \times \frac{1}{x} - 1, 4x \times \frac{1}{x}$
 $-5, 0, 4$
 $\rightarrow 3n - 4 \rightarrow 3 \times 1 - 4 = -1 \checkmark$

$$a_n = r, a, v, \dots \rightarrow d = r \rightarrow r_{n+1} \xrightarrow{r_0 \text{ م.م.}} \varepsilon |$$

$$b_n = r, a, \Lambda, \dots \rightarrow d = r \rightarrow r_{n-1} \xrightarrow{r_0 \text{ م.م.}} \varepsilon |$$

✓ جملہ کی مشیت

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$$x-d + x + x+d = 21 \rightarrow r_x = 21 \rightarrow x = v$$

$$v-d + v+d + v+r_d = 10a \rightarrow r_d = 10a \rightarrow d = r_n$$

حواشی : $\frac{a_3 - a_2 + a_1}{a_1} = \frac{-1}{r}$ $\left. \begin{matrix} a_1 = -r_1 \\ a_2 = r_2 \\ a_3 = 9r \end{matrix} \right\} \rightarrow 9r - r_2 - r_1 = v$ ✓

(1, v)

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$$a_1 + a_r + a_r = 1a \quad a_\varepsilon + a_a = 2a$$

$$a-d + a + a+d = 1a \rightarrow r_a = 1a \rightarrow a = d$$

$$a+r_d + a+r_d = 2a \rightarrow d = r$$

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$$\frac{9}{r} (x-d + x + v d) = 9 \left(\frac{r}{r} (\cancel{x-d} + \cancel{x} + d) \right)$$

$$\frac{18x + 9\varepsilon d}{r} = \frac{9r(x + r_d)}{r}$$

$$\left[\frac{r v 9}{18} \right] = a \varepsilon \quad \frac{a r_0}{a v} = \frac{r 9}{1 r} = r$$

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$$a_1 = 11, a_v = r_a \rightarrow r_a = 11 + 9d \rightarrow r_a - 11 = 9d \rightarrow d = \varepsilon \rightarrow a_n = \varepsilon n + v \rightarrow$$

$$11, 1a, 19, r_r, \dots$$

$$r_n, \dots, r_r, \dots, 1r \rightarrow a_1 = r_n, a_\varepsilon = r_r \rightarrow r_r = r_n + r_d \rightarrow d = -a$$

$$r_n, r_r, r_n, r_r, 1r \rightarrow \frac{-a n + r_r}{1b a 1, \varepsilon}$$

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