

$$\therefore t_n = \frac{2n+1}{n+1} \rightarrow n=1, n=2, n=3, n=4, n=5$$

$$\frac{3}{2} = \frac{3}{2}, \frac{5}{3} = \frac{5}{3}, \frac{7}{4} = 1, \frac{9}{5} = \frac{9}{5}, \frac{11}{6} = \frac{11}{6}$$

$$\left[\frac{3}{2}, \frac{5}{3}, 1, \frac{9}{5}, \frac{11}{6} \right]$$

جواب) $t_n = \frac{(-1)^n}{\sqrt{n+2}}$ $\xrightarrow{n=13} \frac{(-1)^{13}}{\sqrt{14+2}} = \boxed{\frac{-1}{\sqrt{16}}}$

$$\hookrightarrow t_n = 2n - \left[\frac{n}{f} \right] \xrightarrow{n=13} 2 \times 13 - \left[\frac{13}{2} \right] = 26 - 6 = 20$$

الف) $t_n = 2n - 1$.

$2n - 1 = 0$
 $2n = 1$
 $n = 0.5$

عمی جلد آں منفی است

۵ جلد

۱) $t_n = n^2 - 1 \quad n \in \mathbb{N} \rightarrow (n-1)(n+1)$
 $\mathbb{N} = \{1, 2, 3, 4, \dots\}$

الف) $t_n = 2n - 14$
 $2n - 14 = 0$
 $2n = 14$
 $n = 7$

1. جملات مثبتة $\rightarrow$

1	+
0	-
1	+

1, 2, 3, 4, 5, 6, 7

$\therefore t_n = n^2 - 1 \quad n + \underbrace{rV}_{r \times q} \rightarrow (n-r)(n-q)$

$$t_f = V \quad t_r = ? \quad a_n = r_n - \omega$$

$$t_q = 15 \quad t_1 = \psi - \omega = -2$$

$$\frac{\omega d = 10}{1d = 4}$$

$$t_n = t_1 + (n-1)d \rightarrow t_r = -5 + (r-1)10 = \underline{r}$$

$$\underline{6} \quad t_f - d = t_p \rightarrow v_p = \underline{f}$$

٢

(۳) چند جمله حقیقی از دستا بهای زیر

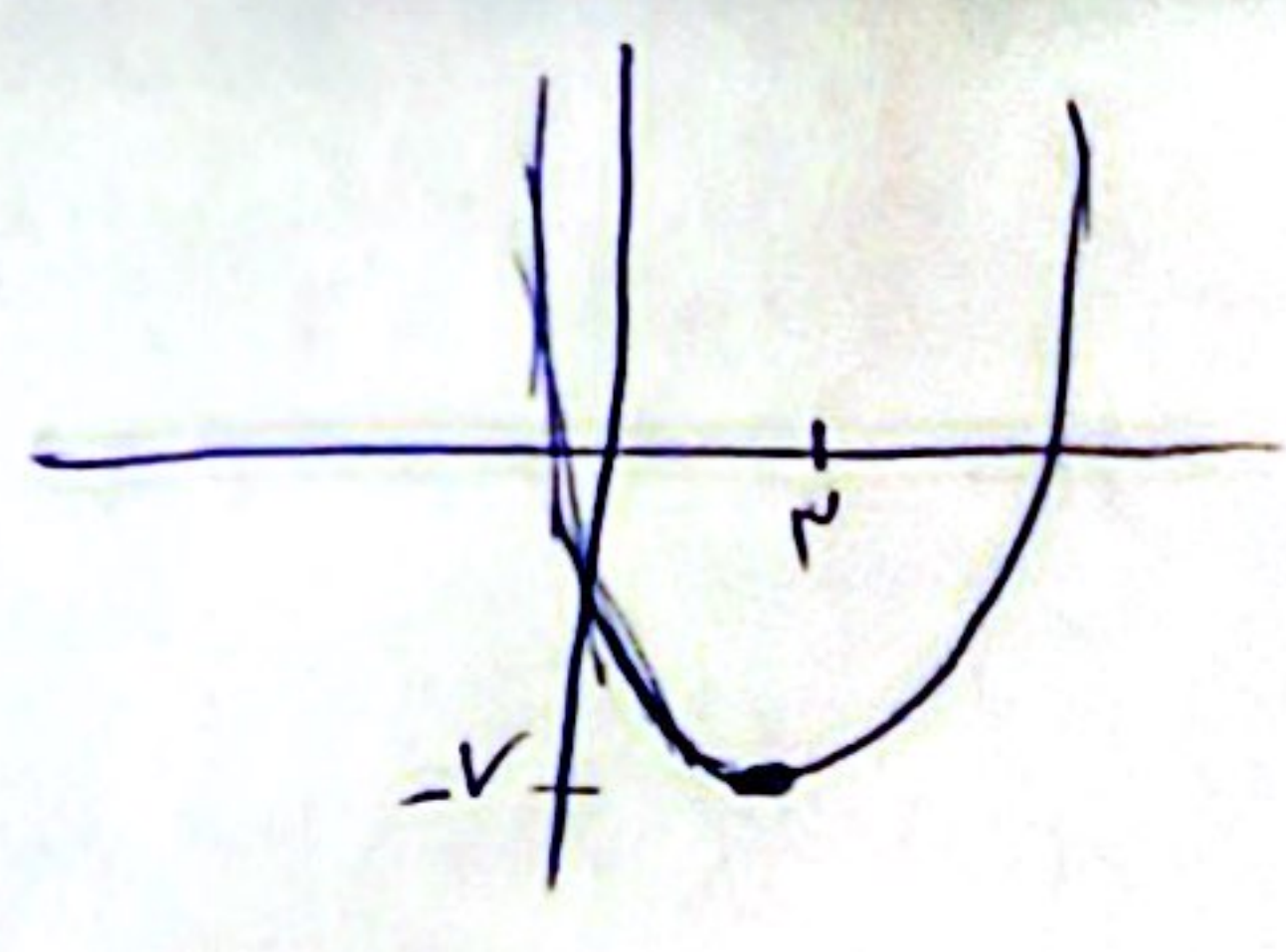
④ ناصبہ ← صغر + حنفی

⑤

④ گسترش به

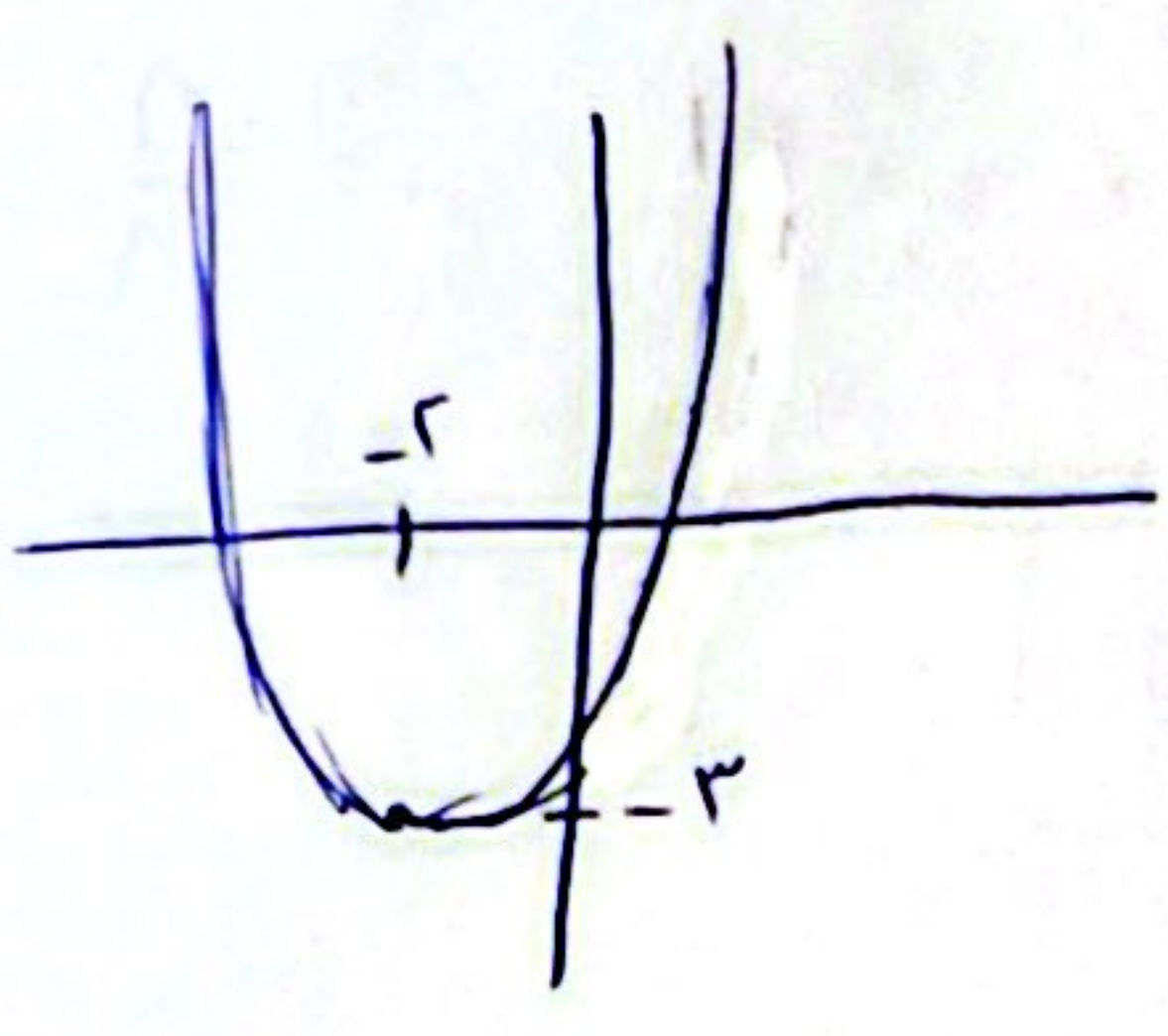
الف) $t_n = n^2 - 9n + 2$

ext $\left| \frac{-b}{2a} = \frac{9}{2} = 4.5 = n \right.$
 $\therefore t_n = 2 - 9 + 2 = -5$



ب) $t_n = n^2 + 6n + 1$

ext $\left| \frac{-b}{2a} = n = \frac{-6}{2} = -3 \right.$
 $\therefore t_n = 9 - 18 + 1 = -8$



$t_n = -f, -V, -1, -V, -f, \dots$
 (1) (2) (3) (4) (5)

$t_n = n^2 - 4n + 1$ $t_1 = 1 - 4 + 1 = -2$

$t_n = an^2 + bn + c$

$\begin{cases} a = 1 \\ a = 1 \end{cases}$

$b \Rightarrow \frac{2+b}{2} = -f$
 $b = -4$

$n = c = \dots \rightarrow n = -f + 0$
 $n = 1$

⑤ (شماره زوج) جدا نمائیم

$t_n = -4, -1, 1, 2, 1, \dots$
 (1) (2) (3) (4)

$t_n = an^2 + bn + c \rightarrow t_n = 2n^2 - n - 4$

$b \Rightarrow \frac{2+b}{2} + b + (-4) = -4$

$b = -1$

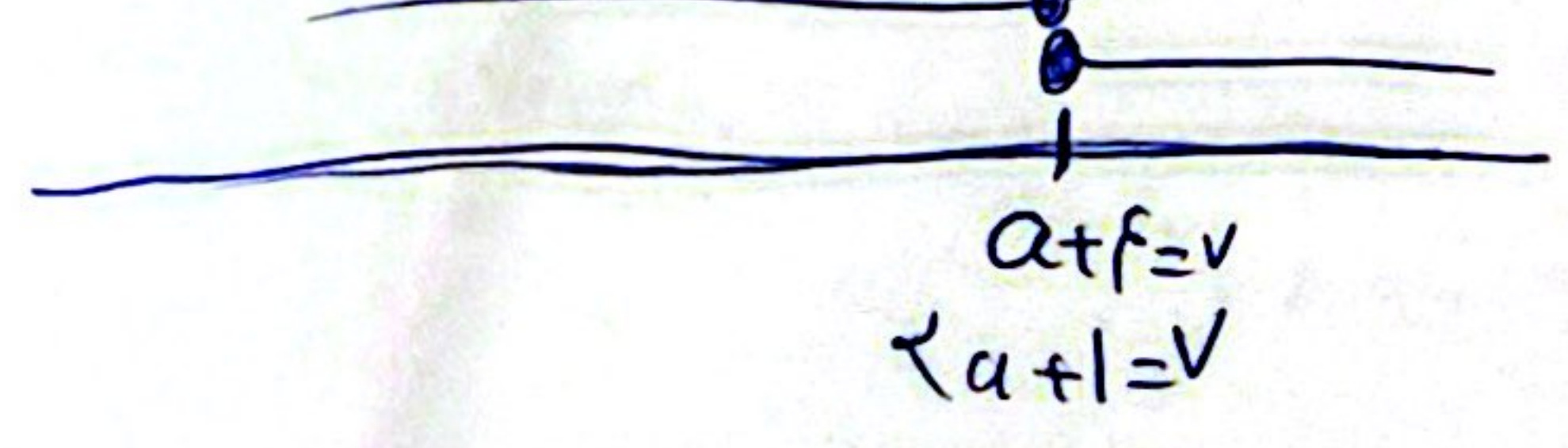
$c = 10$

$\begin{cases} f = 2a \\ a = 2 \end{cases}$

$c = -4$

$(-\infty, a+f], [2a+1, +\infty) \rightarrow a+f = 2a+1$

$(-\infty, 2], [2, +\infty)$ $\{2\}$ اشتراک $\{2\} = a$ $2 \leq a$ $\rightarrow$ اشتراک $= \emptyset$



$a \geq 2$ س

⑥

⑦ اعداد زوج (1..5)

$\left[\frac{99}{3} \right] = 33$
 $\left[\frac{99}{4} \right] = 24$
 $\left[\frac{99}{5} \right] = 19$
 $\left[\frac{99}{10} \right] = 9$

الف) 3
 ب) 5

$n(A \cap B) = \frac{3 \times 5}{10} = 1.5$

$A \subset B$
 $A \cup B$

$n(A \cup B) = n(A) + n(B) - n(A \cap B)$

$33 + 24 - 9 = 48$