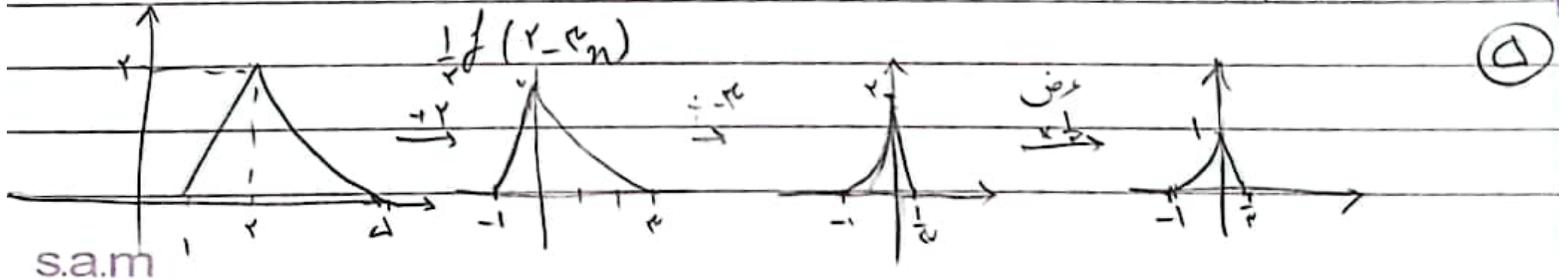
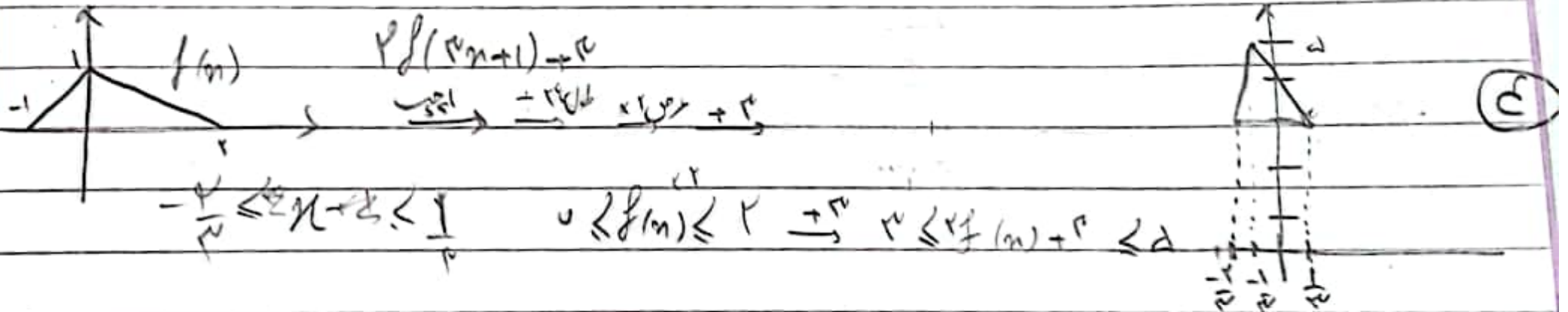


۱. ایک

$$\left| \frac{r^n n + r}{a} \right| < d \rightarrow -10 \leq r^n n + r \leq 10 \quad \boxed{-5 \leq n \leq 5} \quad (1)$$

$$f(n) \Rightarrow D_f = [-r, r] \quad -r \leq n \leq r \xrightarrow{+r} -5 \leq n \leq 5 \xrightarrow{+r} \boxed{-1 \leq n \leq 1} \quad (2)$$

$$-1 \rightarrow \frac{r^n - 1 + 1}{r} = 1 \xrightarrow{+r} d \quad D_{f(n)} = (-1, d) \Rightarrow -\frac{r}{a} < r - d n < r \quad \boxed{D = \left(-\frac{r}{a}, \frac{r}{a}\right)} \quad (3)$$



s.a.m

$$y = -\frac{1}{2} \left(x - \frac{15}{4}\right)^2 + \frac{5}{8} \left(x - \frac{15}{4}\right) + 1 \cdot \frac{15}{4}$$

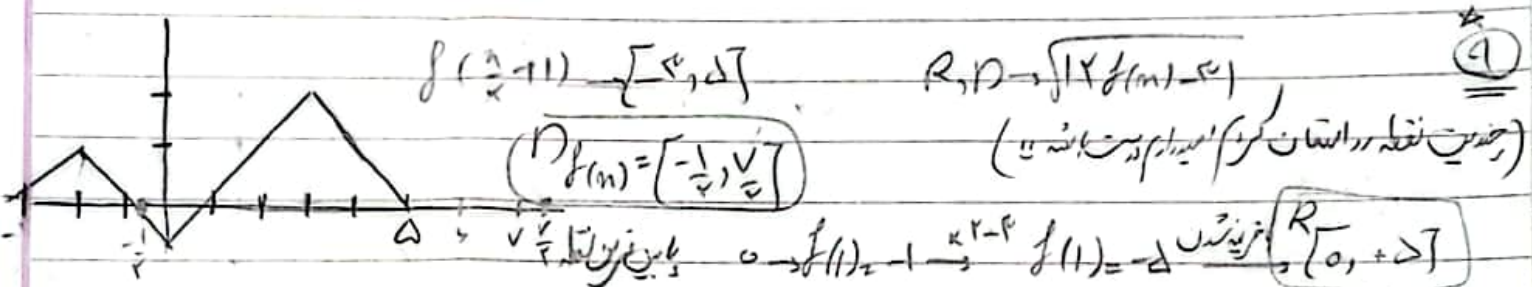
A hand-drawn graph of a parabola on a coordinate plane. The parabola opens downwards, with its vertex at (1, 2). It crosses the x-axis at (-1, 0) and (3, 0). The y-axis is labeled with 2 at the vertex's height. The x-axis has tick marks at -1 and 1.

$\alpha \beta$ (V)

$$\left\{ \begin{array}{l} \beta_1 (1 - r(d)) = -V \\ \beta_2 (1 - r(d)) = -V \end{array} \right\} \Rightarrow \frac{\alpha}{\beta} = \frac{V}{r}$$

$$D_f(a, d] \cap D_g[-1, b) \quad D'_x(-r, d) \rightarrow f(n-1) + g(n+1) \quad \text{Case } a-b \text{ (A)}$$

$$a+1 = -r \quad r = -r \quad b-1 = d \quad b = d \Rightarrow a-b = -d$$



$$= \frac{w, r}{v, 1} \rightarrow \left(\frac{(n-r)+1}{r(n-r)+1} \right) + 1 = g(n) \rightarrow \left| \frac{n-1}{r(n-r)} \right| + n+1 < 0 \quad \text{if } r \geq 1 \quad \text{if } r \geq 1 \quad \text{if } r \geq 1$$

+ برای اینکه عددهای منفی $x_{n+1} < -1$ $\frac{x_n^2 - 4}{x_n - 2} < 0$ $\rightarrow \frac{x-1}{x+1} < 0$
 که در این حالت داخل عدد منفی $\frac{x-1}{x+1}$ $\frac{-\sqrt{2}}{-1} < \frac{\sqrt{2}}{-1} < \frac{2}{-1}$