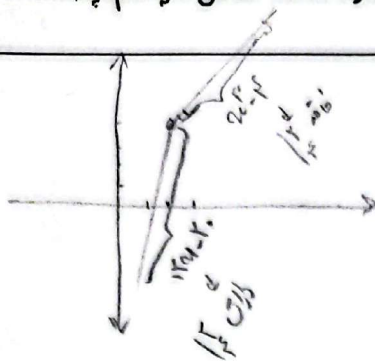




$$n_1^{\text{F}} - n_2^{\text{F}} / \text{Pat} = P_1 \Rightarrow n_1 = P_1, \quad y = P_1$$

$$a=r \rightarrow \begin{cases} u^r \cdot r : u > r \\ ru - r : u \leq r \end{cases}$$

$$f'(r) = r \rightarrow f(r) = r^2 \cdot \frac{1}{2} + K \rightarrow K = -\frac{1}{2}$$

الف)  $f(v) = (v_x v) - 4 = 17$

$$\therefore f(f(n)) = r(rn - 1) - 1 \longrightarrow 921 - 1 - 1 \longrightarrow 921 - 1$$

$$y = \frac{ax}{x-1} \xrightarrow{\frac{y}{y}} \frac{ay}{y-1} = x \frac{\frac{y}{y}}{\frac{y}{y-1}} = \frac{-x}{x-a} \rightarrow \frac{x}{x-a} = y$$

اسمہ کی

$$A \mid \frac{r_u}{u} \rightarrow \frac{r_u}{r_u - u} = a \rightarrow \frac{r_u}{a} = a \rightarrow \boxed{a = r}$$

$$f^{-1} = \{(d, v), (v, f), (f, v), (v, f)\} \quad g^{-1} = \{(v, f), (f, v), (d, v)\}$$

$\text{fol}^{-1} = \{ (f, v), (r, d), (v, r), (r, y) \} \rightarrow$

$$\tau_1 f \circ f = \{(x, f), (0, f), (x, v), (x, y)\} \rightarrow \begin{matrix} \text{fok} & \text{fok} \\ \text{fok} & \text{fok} \end{matrix}$$

$$c) \log^{-1} \{ (\pi, \omega), (7, 7) \} \rightarrow \mathbb{Z}_3 \xrightarrow{\gamma_0^{-1}} \mathbb{P}^1 \rightarrow \mathbb{P}^1 \xrightarrow{\gamma_{-1}^{-1}} \mathbb{A}^1$$

$$1) \text{ } \varphi: \{(2,1), (2,2), (2,3)\} \rightarrow \mathbb{Z}_6 \text{ } \varphi(2,1) = 1 \rightarrow 2 \rightarrow 3 \rightarrow 4 \rightarrow 5 \rightarrow 0$$

$$\text{for } \{ (r, f), (r, 1), (r, 1) \} = \neq$$

$$g^{-1} \{ (1, 2), (3, 4), (2, 4) \}$$

$$\frac{h}{f} = \left\{ \left( \epsilon, \frac{1}{\lambda} \right) \right\}$$

$y = \frac{3x+1}{x-2}$  جانب قائم = 2 جانب افقی = 3  
 $x=0 \rightarrow -\frac{1}{2}$

\* دایره نایب دایره های یک یک، دایره نایب.

$f(x) = |x-1| - |x-3|$

$f(x) = \begin{cases} \frac{x+4}{2} : x \in [1, 2] \\ \frac{x-4}{2} : x \in [2, 3] \end{cases}$

$x = \frac{5y}{5} = 1 \rightarrow y = 2x - 4 \rightarrow x = 2y - 4$

$x^3 + 4 \xrightarrow{\text{دایره}} \sqrt[3]{x-4}$   
 $x-1 \xrightarrow{\text{دایره}} \frac{x-1}{4}$

$f(x) = \begin{cases} \sqrt[3]{x-4} : x > 4 \\ \frac{x-1}{4} : x \leq 4 \end{cases}$

$x^2 - \frac{(x+1)^3}{x+3} \rightarrow \frac{x^3 + 3x^2 - (x+1)^3}{x+3} \rightarrow \frac{x^3 + 3x^2 - x^3 - 3x^2 - 3x - 1}{x+3} = \frac{-3x-1}{x+3}$

$y = \frac{-3x-1}{x+3} \xrightarrow{\text{دایره}} \frac{-3y-1}{y+3} = x \rightarrow \frac{3x-1}{x-3} = y \times \frac{y}{y-4} \rightarrow \frac{ay+b}{cy+d}$

$f^{-1}(-2) = \frac{2 \times (-2) - 1}{-4 - 4} = \frac{-1}{-8} = \frac{1}{8}$

$y = \frac{x}{x^2+1} \rightarrow x = \frac{y}{y^2+1} \rightarrow xy^2 - y + x = 0 \rightarrow \Delta = 1 - 4x^2$

$y = \frac{1 \pm \sqrt{1-4x^2}}{2x}$

$f^{-1}(x) = \frac{1 + \sqrt{1-4x^2}}{2x}$