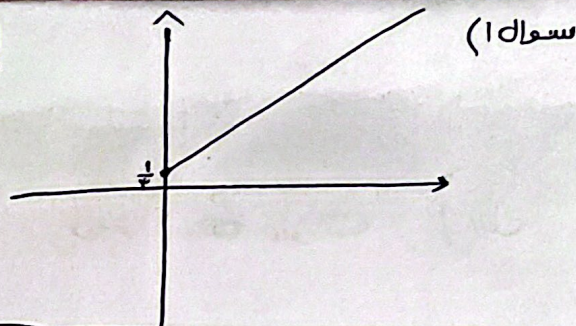


$$y \geq 0 \Rightarrow x = 3y - 1 \Rightarrow y = \frac{x+1}{3}$$

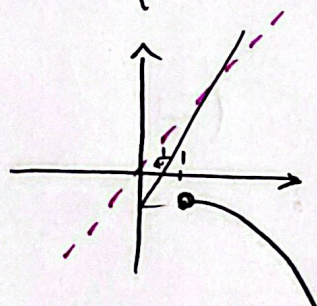
$$y > 1 \Rightarrow x = -y^2 \Rightarrow y = \sqrt{-x}$$



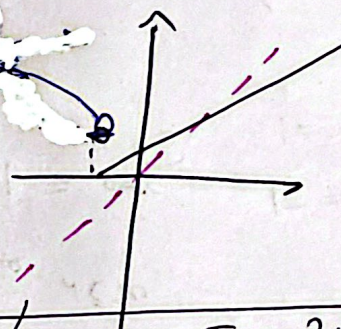
$$y = \begin{cases} 3x - 1 & x \geq 0 \\ -x^2 & x < 0 \end{cases}$$

مشت عقیقہ

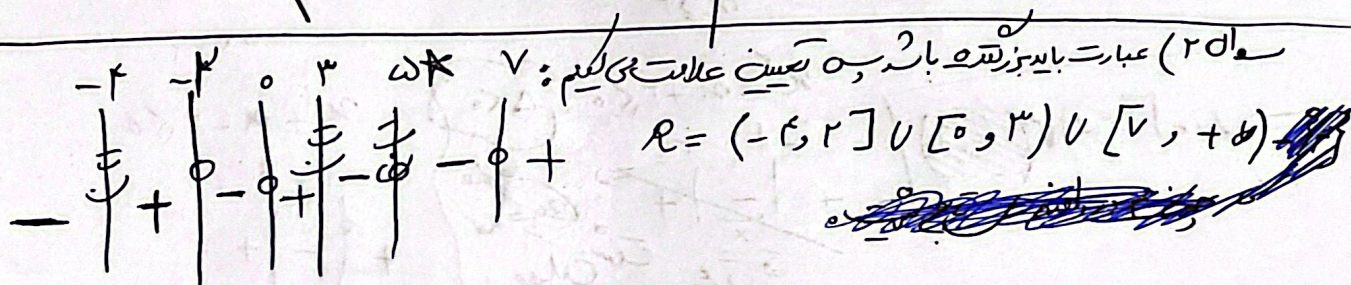
سوال ۱۵) معکوس تابع را در نظریه کنیم
دستگاه آن را رسم می کنیم



فرض کنیم $y = x$



تابع هست ✓



$$R = \{x \mid x(x^2 - 4) \neq 0\} \Rightarrow x^2 - 4 \neq 0 \Rightarrow x \neq \pm 2$$

ب صورت شماره ۱۵ و ۱۶
مورد شماره ۱۵ و ۱۶

$$-2 < x < 2 \Rightarrow P_f = (-2, 0) \cup (2, +\infty)$$

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

$$-2 < x < 2 \Rightarrow (-2, 0) \cup (2, +\infty)$$

$$x - 2 \neq 0 \Rightarrow x \neq 2 \Rightarrow x < 2$$

$$R = (-\infty, -2) \cup (-2, 2) \cup (2, +\infty)$$

$\textcircled{R^+} \not\subset R \Rightarrow \exists r > 0, r \notin \text{مخرج}$

(پ)

$$\overline{D}_{\text{مور}} = |x - r| - x^2 \geq 0$$

$x^r - x + r \leq 0$

$-1)^r$

$+ | \frac{-}{x} | +$

$\bar{c} \bar{c} \varepsilon$

$\bar{c} \bar{c} \varepsilon$

$\Delta < 0$

$a = \sqrt{\dots}$

$$\begin{array}{r} 255 \\ 2^r + 2 - 250 \\ - 2 \quad | \\ + \quad | - \quad | + \\ [r, 1] \checkmark \end{array}$$

$$\Rightarrow \textcircled{R}$$

$$\sqrt{1/\alpha} [u, \infty] = \left[\frac{1}{\alpha} - \frac{1}{\mu} \right] \cdot \frac{1}{\mu} + \Rightarrow \frac{1}{\mu} \cdot \{1\} \cup [\mu, +\infty)$$

$$| |n-r|-1 | - k = 0 \quad n = k+r \quad (k=1) \quad (v$$

$$|x-r|-1 = k \begin{cases} \rightarrow x-r = k+1 \\ \rightarrow x-r = -k-1 \end{cases}$$

$$|x-r|-1 = -k \rightarrow x-r = -k+1$$

$$\left. \begin{array}{l} k+r=n \\ 1-k=n \end{array} \right\} \mu_k=r \rightarrow \boxed{k=1} \rightarrow n-r = +k-1$$

(ند)

$$n \neq +1/-1/r \Rightarrow \text{نہی}$$

$$n^r - 9n + 9 \rightarrow (n-9)^r \Rightarrow \text{نہی}$$

$$\frac{n+1}{n} > 0 \Rightarrow n > -1 \quad n > 0$$

(9د)

$$\log \frac{1}{r} \rightarrow n < 1 \rightarrow \frac{1}{r} < 1 \checkmark$$

$$\rightarrow n > 1 \rightarrow \frac{1}{r} > 1 \times$$

$$\Rightarrow n > 1 \Rightarrow \begin{matrix} n < +1 \\ n > 0 \end{matrix}$$

(0, 1)

(1, د)

$$\log \frac{1}{r} \log \frac{1}{r}$$

$$-2, < r n^r - 1 \leq 2$$

(1, د)

$$\Rightarrow -r \leq r n^r \leq r \Rightarrow \frac{-r}{r} \leq n^r \leq \frac{r}{r}$$

$$\Rightarrow \frac{-1}{1} \leq n \leq \frac{1}{1}$$