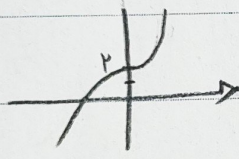
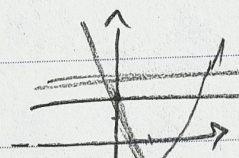
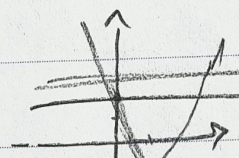


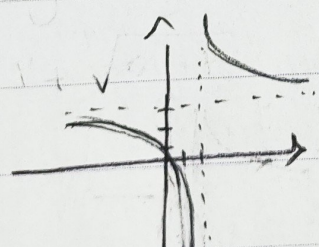
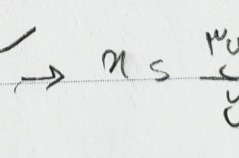
الف) $n^2 - n = 2 \Rightarrow n^2 - n - 2 = 0 \rightarrow \frac{x^2 - 1}{\text{عقبات}}$, $n = 2$
 $m = 3$ (1) (2)

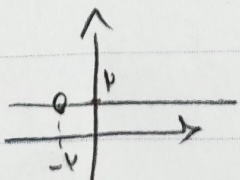
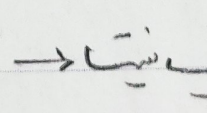
ب) $m = 2 \Rightarrow a = -1 \Rightarrow n = 2$

$x = 1 \rightarrow y = 2 \Rightarrow R_f = [2, +\infty)$
 $x + a < 2 \xrightarrow{x < 1} a \leq 1$ (3) (4) (5)

$3n - 1 \xrightarrow{x > 1} 3n > 3 \rightarrow 3n - 1 > 2$
 $an + a - 1 \rightarrow n \leq 0 \rightarrow an \leq 0 \rightarrow an + a - 1 \leq a - 1 \rightarrow a < 0$
 $\textcircled{a} a > 0 \Rightarrow 0 < a < 3$ (4) (5)

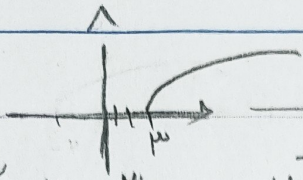
الف)  $\rightarrow$  $x \leq y^3 + 2 \Rightarrow y \leq \sqrt[3]{x - 2}$
 ب) $\text{ent} \left| y \leq 2 - n + 2 = -2 \right.$  (5)

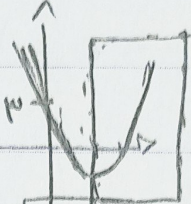
الف)  $\rightarrow$  $x \leq \frac{y^3 + 1}{y - 2} \Rightarrow xy - 2n = \frac{y^3 + 1}{y - 2}$
 $\Rightarrow y(n - 3) = 2n + 1 \Rightarrow y \leq \frac{2n + 1}{n - 3}$ (5)

ب) $y = 2 \rightarrow$  $\rightarrow$  (5)

Date:

Sub:

الف)  $x = \sqrt{y - k} \Rightarrow$ ④
 $x^2 = y - k \Rightarrow y = x^2 + k, x \geq 0$ ⑤

ب) $x = 1, x = k$  $x = \sqrt{y - k} \Rightarrow$
 $x + 1 = (y - k)^2 \Rightarrow y = \sqrt{x + 1} + k$

$x = y + \sqrt{y} \xrightarrow{+ \frac{1}{k}} x + \frac{1}{k} = (y + \frac{1}{k})^2 \Rightarrow \sqrt{x + \frac{1}{k}} = \sqrt{y} + \frac{1}{k} \Rightarrow$ ⑥
 $\sqrt{x + \frac{1}{k}} - \frac{1}{k} = \sqrt{y} \Rightarrow (\sqrt{x + \frac{1}{k}} - \frac{1}{k})^2 = y \Rightarrow y = \underbrace{(\sqrt{x + \frac{1}{k}} + \frac{1}{k})^2}_{x + \frac{1}{k} + \frac{1}{k} + \frac{1}{k^2}} = \sqrt{x + \frac{1}{k}}$
 $a = 1, b = \frac{1}{k}, c = -\frac{1}{k}$ ⑤
 $a + kb + kc = 1 + 1 - 1 = 1$

x_1
 $\sqrt{x_1^2 - r} = y$ ⑦
 $\sqrt{x_2^2 - r} = y$ ⑤
 $x_1^2 = x_2^2 \Rightarrow$ تساوی است پس باید که
 $x = \frac{y}{\sqrt{y^2 - r}} \Rightarrow x^2 = \frac{y^2}{y^2 - r} \Rightarrow$ تساوی در این

$xy^2 - rm = y^2 \Rightarrow y^2(x - 1) = rm \Rightarrow y^{-1} = \frac{r\sqrt{r}}{\sqrt{x^2 - 1}}$

$x = \frac{y}{1 + |y|}$ ⑧
 $y \geq 0 \Rightarrow x + ny = y \Rightarrow y(n - 1) = -n \Rightarrow y = \frac{-n}{n - 1}$ ⑤
 $y < 0 \Rightarrow x - ny = y \Rightarrow y(n + 1) = n \Rightarrow y = \frac{n}{n + 1}$
 $\Rightarrow f(-\frac{r}{\omega}) = \frac{-\frac{r}{\omega}}{\frac{r}{\omega}} = -\frac{r}{r} = -1, x = \sqrt{y - 1} \Rightarrow y^{-1} = (n + 1)^2 \Rightarrow$
 $g(-\frac{r}{\omega}) = (\frac{r}{\omega})^2 = \frac{r}{r\omega} \rightarrow f(-\frac{r}{\omega}) + g(-\frac{r}{\omega}) = -\frac{r}{r} + \frac{r}{r\omega} = \frac{-r\omega}{r\omega}$

Date:

Sub:

$$y = \sqrt[n]{x-1} \Rightarrow 11 = f(m) + \sqrt{f(m)}$$

(10)

$$\sqrt{f(m)} = t \Rightarrow t^2 + t - 11 = 0 \Rightarrow \underbrace{t = -f}_{\text{GUE}}, t = 11$$

(11)

$$\Rightarrow f(m) = 9 \Rightarrow f(m) = \sqrt[n]{x-1}$$