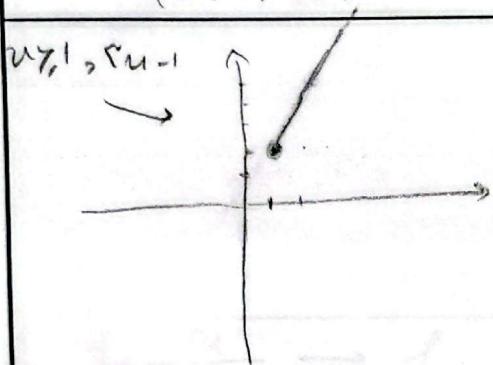


f) $m=3$, $n-n-2 \rightarrow n^2-n-2 \rightarrow (n+2)(n-1)$ $n-1 \times (-1, 0) (-1, 2)$
 $\Rightarrow$

$\hookrightarrow m=2, a=-1, n=2$ ✓
 $(-1, 1), (a, m-1), (1, 2), (a+1, n)$



چون باید یک y در n باشد $n + a$ باید زیر خط $a = 2$ باشد

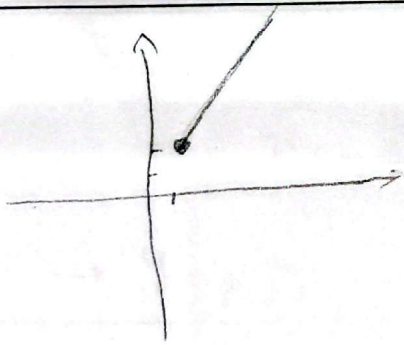
$$u+a < r$$

$u < 1$

$$1+a < r$$

$$a < 1$$

$$a \in (-\infty, 1]$$



$$\begin{aligned} a-1 < r &\rightarrow a < r \\ a \gamma &\rightarrow \underline{0 < a < r} \end{aligned}$$

$$a \in (2, 5)$$

2) $x_i = y_i^r$ $x_i = y_{i+r}^r$ $x_i = x_i \rightarrow y_i^r = y_{i+r}^r \rightarrow y_i = y_{i+r}$
 $y_i^r = x_i - r \rightarrow y_i = \sqrt{x_i - r}$ $y_i = y_{i+r}$ ✓

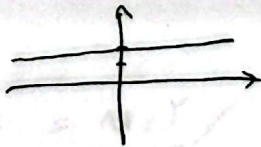
$$y: \mathbb{R}^n \rightarrow \mathbb{R}^n$$

$$u = \omega \rightarrow v = \gamma$$

ب) $u_1 - 1 \rightarrow v_2 = 5$ میل رکھی

الف) $\frac{y+1}{y-2} = x \rightarrow \frac{x+1}{x-2} = y$

$$y = \frac{f + r u}{u + r} \Rightarrow y = r$$



کتاب پر یک ایست

$$1) \quad u = \sqrt{y-r} \quad , \quad u = \sqrt{y-r} \rightarrow u = u \rightarrow u^2 = u^2 \rightarrow y-r = y-r$$

$$\text{Case 1} \rightarrow u = \sqrt{y-r} \rightarrow u^2 = y-r \rightarrow \boxed{y = u^2 + r}$$

$$\underline{y_1 = y_2}$$

2)

$$u^2 - 8u + 2$$

$$y = (u-r)^2 - 1 \rightarrow (u-r)^2 = y+1 \rightarrow u = r \pm \sqrt{y+1}$$

(V جواب)

$$\sqrt{u} = t \quad y = t^2 + t$$

$$\Delta = \frac{-1 \pm \sqrt{1+4t}}{2} \rightarrow u = \frac{1}{2} + y - \frac{\sqrt{1+4t}}{2}$$

$$a+rb+tc = 1+1-1=1$$

$$y = u + \frac{1}{2} - \frac{\sqrt{1+4t}}{2}$$

$$\begin{cases} a=1 \\ b=\frac{1}{2} \\ c=-\frac{1}{2} \end{cases}$$

$$(X) \quad r = \sqrt{y+1}$$

$$f'(u) = r + \sqrt{u+r}$$

$$y = \frac{u}{\sqrt{u^2-r}} \rightarrow f(u_1) = f(u_r) \rightarrow \frac{u_1}{\sqrt{u_1^2-r}} = \frac{u_r}{\sqrt{u_r^2-r}} \xrightarrow{\text{Cross}} u_1^2 \sqrt{u_r^2-r} = u_r^2 \sqrt{u_1^2-r}$$

$$u = \frac{y}{\sqrt{y^2-r}} \rightarrow y^2 = \frac{r u^2}{u^2-1} \rightarrow y = \pm \sqrt{\frac{r u^2}{u^2-1}}$$

$$\rightarrow y = \sqrt{\frac{r u^2}{u^2-1}} \rightarrow f(u) = \frac{\sqrt{r} u}{\sqrt{u^2-1}}$$

$$\boxed{u_1 = \pm u_r}$$

$$\underline{u_1 = u_r \checkmark}$$

$$f(u) = \frac{u}{1+|u|} \quad (u) \text{ (SOS)} \rightarrow \frac{u}{1+|u|} = -\frac{r}{0} \rightarrow -r-|u| = 0 \rightarrow -r = |u| \rightarrow -r = \pm u$$

$$\begin{aligned} -r &= |u| \rightarrow -r = \pm u \\ -r &= u \rightarrow u = -r \\ -r &= -u \rightarrow u = r \end{aligned}$$

$$y(-\frac{r}{0}) \quad y(u) = \sqrt{u} - 1 = -\frac{r}{0} \rightarrow \boxed{u = \frac{9}{r_0}}$$

$$\text{جاب} = -\frac{r}{r_0} + \frac{9}{r_0}$$

$$\text{جاب} = -\frac{r}{r_0} + \frac{9}{r_0}$$

$$f^{-1}(u) = \sqrt{u-1} \quad y(u) = f(u) + \sqrt{f(u)}$$

$$\rightarrow y(u) = 12 \quad \underline{f(u) = 9}$$

$$f^{-1}(9) = u \rightarrow u = \sqrt{9-1} = u = 2 \checkmark$$

$$\boxed{y^{-1}(12) = 12}$$