

الف) $y = x^2 \omega \rightarrow x^2 = y + \omega \rightarrow x = \sqrt{y + \omega} \rightarrow \bullet I_y = [-\omega, \omega)$

↪ $y = x^3 + 1 \rightarrow x = \sqrt[3]{y-1} \rightarrow D_y = \mathbb{R}$

الف) $y = x^2 - 2x + 4 \rightarrow y - 4 = (x - 1)^2 \rightarrow x - 1 = \sqrt{y - 4} \rightarrow x = \sqrt{y - 4} + 1$
 $D_y: [4, +\infty)$

$$D_Y: [Y, +\infty)$$

ب) $y_1 \omega r \omega = x^r \omega x \cdot 1 + \omega r \omega \rightarrow y \cdot \omega r \omega = (x - y \cdot \omega)^r \rightarrow x - y \cdot \omega = \pm \sqrt{y + \omega r \omega}$

$$x = \pm \sqrt{y \cdot \omega \cdot \omega} \cdot \sqrt{\omega} \rightarrow y \cdot \omega \cdot \omega \geq 0 \rightarrow y \geq -\omega \cdot \omega \in \mathbb{R}, [\omega \cdot \omega, +\infty)$$

$$\text{الف) } yx^p - y = x^p + 3 \rightarrow x^p(y-1) = y+3 \rightarrow x^p = \sqrt{\frac{y+3}{y-1}} \rightarrow \frac{p}{+0} - \frac{1}{-0} + \left(-\infty \frac{p}{p}\right) \rightarrow (+\infty)$$

$$\Rightarrow y|x| - 2y = 2|x| + 1 \rightarrow |x|(y-2) = \frac{5}{4} + 1 \rightarrow |x| = \frac{\frac{5}{4} + 1}{y-2} \rightarrow \frac{-\frac{1}{4}}{y-2} \quad \begin{matrix} 2 \\ + \quad - \quad + \end{matrix}$$

$$R_f = (-\infty, -\frac{1}{f}] \cup (y, +\infty)$$

$$yx^p - \frac{p}{p-1}xy - 1 = 0 \rightarrow \Delta = -b^2 - 4ac \Rightarrow 1/y^p + y \geq 0 \rightarrow \frac{1}{y}(y+1) \geq 0$$

$$\begin{array}{c} -\frac{1}{K} \\ \hline + \quad - \quad + \end{array} \rightarrow R_f: (-\infty, -\frac{1}{K}] \cup [0, +\infty)$$

الف) $\text{Ext} \left| \begin{array}{c} \frac{\mathbb{Z}}{p} = \mathbb{Z} \\ -V \end{array} \right. \rightarrow R_f: [-V, +\infty)$

$\Rightarrow \text{ext} \mid \frac{P}{P} = P \rightarrow R_f: (-\infty, \infty]$

الف) $\text{ext} \left| \begin{array}{l} \frac{4}{p} = 3 \\ -V \end{array} \right. \rightarrow R_f \cdot \sqrt{-V + \infty} \rightarrow [0 + \infty)$

ب) $\text{ext} \left| \begin{array}{l} p = \frac{4}{p} \\ 14 \end{array} \right. \rightarrow R_f \cdot \sqrt{(-\infty 14)}; [0 \sqrt{14}]$

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الف) $R_f = R$

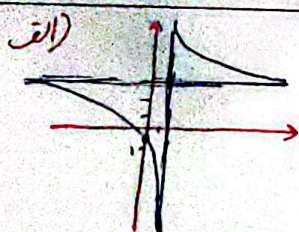
ب) $R_f \cdot [0 + \infty)$

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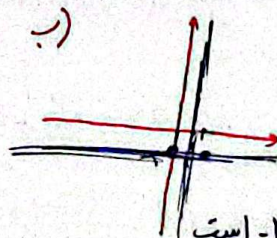
الف) $R_f \cdot R - \{3\}$

ب) $R_f \cdot [0 + \infty) - \{2\}$

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مخانب قائم: ٢
مخانب افقی: ٣



مخانب قائم: $\frac{1}{2}$
مخانب افقی: ٢
★ چون ساده نشد و مخرج ٢- است
پس است

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الف) $[2 + \infty) \rightarrow$ چون ٥ به توان ٢ رسیده

ب) ~~.....~~

$R_f : (-\infty, \sqrt{2}) \cup [\sqrt{2}, +\infty)$

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