

سری

دامنه تقریب: $y = \sqrt{x^2 f(x+1)}$

$$-\frac{1}{b} + \frac{1}{b} =$$

$$D = [0, 1]$$

$$f(x) = \left(\frac{1}{x}\right)^{x-2} - 1$$

$$f(x+1) = \left(\frac{1}{x+1}\right)^{x-1} - 1$$

$$f(x+1) = 0$$

$\rightarrow x = 1$

$$f(x) = \sqrt{x + |x+2|}$$

$$D_{f(-x)} = ?$$

$$f(-x) = \sqrt{-x + |-x+2|}$$

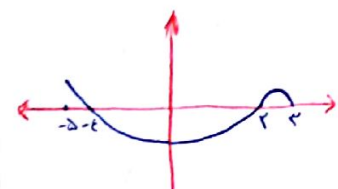
$$x > 2 \rightarrow -x + 2 < 0$$

$$x < 2 \rightarrow -x + 2 > 0$$

$$\left. \begin{array}{l} x < 2 \\ -x + 2 > 0 \end{array} \right\} \rightarrow D_{f(-x)} = (-\infty, 2]$$

تکرار:

$$y = \sqrt{\frac{x-1}{f(x)}}$$



$$\frac{x-1}{f(x)} \geq 0$$

$$\Rightarrow \text{همواره مثبت} \Rightarrow (2, \infty)$$

$$\Rightarrow \text{همواره منفی} \Rightarrow (-\infty, -1]$$

$$\Rightarrow \text{صورت صفر} \Rightarrow \{1\}$$

$$\Rightarrow D = (-\infty, -1] \cup \{1\} \cup (2, \infty)$$

$$y = \frac{1}{9x^4 - 7x^2 - 4x - 3}$$

دامنه برابر

$$y = \frac{1}{3x^2 + ax + b}$$

$$\sqrt{-a-b} = ?$$

ریشه مضروب برابر = دامنه برابر

$$f(x) = x^3 + x$$

$$y = \sqrt{f(x) - f\left(\frac{x}{2}\right)}$$

$$\hookrightarrow \sqrt{x^3 + x - \frac{4x}{x^2} - \frac{x}{2}}$$

$$D = (-\infty, -2] \cup [2, \infty)$$

$$\hookrightarrow x^3 + x - \frac{4x}{x^2} - \frac{x}{2} \geq 0$$

$$x^3 + x \geq \frac{4x}{x^2} + \frac{x}{2}$$

$$x \geq \frac{x}{2} \rightarrow x \geq 2$$

$$x^2 \geq 4 \rightarrow x \leq -2$$

$$f(u^2+u) = u^2-1$$

$$f(r)+f(u)=?$$

$$1+u=\Lambda$$

$$u=1 \rightarrow f(r) = r-1=1$$

$$u=r \rightarrow f(u) = \Lambda-1=u$$

$$\frac{g(\sqrt{v}-r)}{f(\sqrt{r}+r)} = ? = \frac{(\sqrt{v}-r, r)^r - rv}{(\sqrt{r}+r)^r + \Lambda} = \frac{-r_0}{1_0} = -r$$

$$\begin{aligned} f(u) &= u^2 - 4u^r + 12u & g(u) &= u^2 + 9u^r + 12u \\ f(u) &= u^2 - 4u^r + 12u - \Lambda + \Lambda & g(u) &= u^2 + 9u^r + 12u + rv - rv \\ f(u) &= (u-r)^r + \Lambda & g(u) &= (u+r)^r - rv \end{aligned}$$

$$f(u) = \sqrt{u+\varepsilon\sqrt{u-\varepsilon}} \quad g(u) = \sqrt{u-\varepsilon\sqrt{u-\varepsilon}} \quad \xrightarrow{u \geq \varepsilon} f(u)+g(u) = a+b\sqrt{u+\varepsilon}$$

$$\frac{a+b}{c} = ? \frac{a+b}{\varepsilon} \rightarrow \frac{1}{r}$$

$$\begin{aligned} f(u)^r &= u + \varepsilon\sqrt{u-\varepsilon} \\ g(u)^r &= u - \varepsilon\sqrt{u-\varepsilon} \end{aligned} \quad \left\{ \begin{aligned} f(u)^r + g(u)^r &= 2u \end{aligned} \right.$$

$$f(u)g(u) = \sqrt{u+\varepsilon\sqrt{u-\varepsilon}} \times \sqrt{u-\varepsilon\sqrt{u-\varepsilon}} = \sqrt{u^2 - 14u + 9\varepsilon} = |u+\Lambda| = u+\Lambda$$

$$\rightarrow f(u)^r + g(u)^r + r f(u)g(u) = \varepsilon u + 14 = (f(u)+g(u))^r \rightarrow f(u)+g(u) = \sqrt{\varepsilon u + 14} = r\sqrt{u+\varepsilon}$$

$$f(u) = \frac{u+r}{u^2 - \varepsilon u + r}$$

$$g(u) = \left\{ (r,1), (1,0), (r,\omega), (0,\varepsilon) \right\}$$

$$\frac{g}{f} = ? \left\{ (0,4), (r, \frac{1}{\varepsilon}) \right\}$$

$$\begin{aligned} f(r) &= -\varepsilon \\ f(0) &= \frac{r}{r} \end{aligned}$$

$$\begin{aligned} g(r) &= 1 \\ g(0) &= \varepsilon \end{aligned}$$

$$f(u) = \left\{ (r,r), (r,-1), (\varepsilon,r), (-1,r) \right\}$$

$$g(u) = \left\{ (-r,r), (1,-1), (r,r), (-1,0) \right\}$$

$$f(ru) = \left\{ (\frac{1}{r}, r), (\frac{r}{r}, -1), (r, r), (\frac{1}{r}, r) \right\}$$

$$rg^r f(u) + 1 = \left\{ (-r, 19), (1, r), (r, 9), (-1, 1) \right\}$$

$$f(u^r) = \left\{ (1, r), (-1, r), (\sqrt{r}, -1), (-\sqrt{r}, -1), (r, r), (-r, r) \right\}$$

$$\frac{rf}{g} = \left\{ (-1, \frac{r}{\varepsilon}), (1, -\varepsilon), (r, -1) \right\}$$