

$$\begin{cases} x > 1 & (a+1)(x+1) \\ x \leq 1 & x+x \end{cases}$$

$$r f(a) = f(-r) + a$$

$$r(a+1)(1) = fa - f \rightarrow (fa + 1f = fa - f \rightarrow 1a = -1 \rightarrow a = -1, 1$$

$$f(x) = \sqrt{x} + \frac{1}{\sqrt{x}} + r$$

$$\sqrt{r-\sqrt{r}} \rightarrow \sqrt{\frac{r}{r}} - \sqrt{\frac{1}{r}} = \frac{\sqrt{r-1}}{\sqrt{r}} \xrightarrow{\sqrt{r}} \frac{\sqrt{r-1}}{\sqrt{r}} \sqrt{r} \rightarrow \frac{\sqrt{r-1}}{\sqrt{r}} \cdot \frac{r}{\sqrt{r-1}} = \frac{r\sqrt{r}}{\sqrt{r-1}} \rightarrow \sqrt{r} \xrightarrow{f(x)} + r \rightarrow \sqrt{r} + r$$

$$\sqrt{r+\sqrt{r}} \rightarrow \frac{\sqrt{r}+\sqrt{r}}{\sqrt{r}} \rightarrow \sqrt{r}+r \rightarrow \sqrt{r}+r+\sqrt{r}+r \rightarrow r\sqrt{r}+r$$

$$\begin{cases} r f(x) - r f(-x) = f(x^2 - x) \xrightarrow{x=r} + f(x) - 4 f(-x) = 1x^2 - 2x \\ -x, r f(-x) - r f(x) = f(x^2 + x) \xrightarrow{x=r} f f(x) - 9 f(x) = 12x^2 + 4x \end{cases} \rightarrow f(x) = -5x^2 - \frac{x}{\omega}$$

$$\begin{aligned} x=0 &\rightarrow r f(0) = 0 - 0 + 4m - 1 \rightarrow r f(0) = 4m - 1 \xrightarrow{x=\omega} 10 f(0) = 40m - 10 \\ x=-r &\rightarrow r f(0) = 14 + 2m + 4m - 1 \rightarrow 4 f(0) = 6m + 13 \xrightarrow{x=r} -11 f(0) = -11(6m + 13) = -66m - 143 \end{aligned} \left. \begin{array}{l} 1 f(0) = 40 \\ f(0) = \frac{r\omega}{t} \rightarrow 4, 5\omega \end{array} \right\}$$

$$f(-1), f(-1) = \frac{r+1r+r}{-1} \rightarrow r f(-1) = -11 \rightarrow f(-1) = -9$$

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

$$0 \leq 1-x \rightarrow x \leq 1$$

$$-\sqrt{(1-x)^2} \rightarrow \sqrt{(1-x^2)(1-x)} \rightarrow (1-x)\sqrt{1-x} \xrightarrow{x \leq 1} (1-x)\sqrt{1-x} \rightarrow (x-1)\sqrt{1-x}$$

$$\left. \begin{array}{l} D_f = D_g \\ \text{بعضی نقاطی که در دامنه نیستند} \end{array} \right\}$$

$$f(x) = x\sqrt{x} \rightarrow D_f \rightarrow x \geq 0$$

$$g(x) = \sqrt{x^2} \rightarrow D_g \rightarrow x \geq 0 \rightarrow x \geq 0$$

$$\frac{x}{\sqrt{x}} \rightarrow x \geq 0$$

$$\left. \begin{array}{l} D_f = D_g \\ \text{بعضی نقاطی که در دامنه نیستند} \end{array} \right\}$$

$$[\sqrt{x}] - [\sqrt{x}] \rightarrow D_f, [0, +\infty) \rightarrow \text{بارای هر مقدار مثبت}$$

$$\sqrt{x-1} \rightarrow x-1 \geq 0 \rightarrow x \geq 1 \rightarrow D_g \rightarrow [0, +\infty) \rightarrow \text{بارای هر مقدار مثبت}$$

$$\text{الف) } \frac{r+1}{r-1} = r$$

$$\text{ب) } \frac{r+r}{r-r} = 0, 0$$

$$g = (0)(1) = 0$$

$$\text{الف) } f(r, x-1)$$

$$r, x-1 = r \rightarrow x=1$$

$$r, x-1 = -1 \rightarrow x=0$$

$$r, x-1 = 0 \rightarrow x = \frac{1}{r}$$

$$r, x-1 = r \rightarrow x = \frac{1}{r}$$

$$r, x-1 = r \rightarrow x = \frac{1}{r}$$

$$g(x) \rightarrow \{(1,1)(0,4)(\frac{1}{r}, \omega)(\frac{1}{r}, x)(\frac{1}{r}, -1)\}$$

$$\text{ب) } f(1, x)$$

$$|x|=r \rightarrow x = \pm r$$

$$|x| = -1 \rightarrow \text{مقدار حقیقی}$$

$$|x| = 0 \rightarrow x = 0$$

$$|x| = -r \rightarrow \text{مقدار حقیقی}$$

$$|x| = r \rightarrow x = \pm r$$

$$h(x) \rightarrow \{(-r, 1)(0, \omega)(-r, -1)(r, -1)\}$$