

بازمده

بنا

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تکليف ۷

$$(\sqrt{x-4}\sqrt{x-4} + \sqrt{x+4}\sqrt{x-4})^2 =$$

$$x-4\sqrt{x-4} + x+4\sqrt{x-4} + 2\sqrt{x^2-14x+16} =$$

$$2x+2(|x-4|) = 4x-8 \Rightarrow f+g = \sqrt{f^2-1} = 2\sqrt{x-2}$$

دکتر $x \gg 8$ است چون
در صورت بیان $\sqrt{x-4}$

$$\frac{x+4}{x-4} = -1$$

$$\frac{g}{f} = \left\{ \left(2, -\frac{1}{2} \right) \left(0, \frac{4}{3} \right) \right\} \quad \text{②}$$

$$\left\{ \left(2, -\frac{1}{2} \right) \left(0, \frac{4}{3} \right) \right\}$$

$$f(2) = \frac{4}{-1+4+3} = -1 \quad f(1) = \frac{3}{1-4+4} = 0$$

$$f(3) = \frac{5}{9-12+3} = 0 \quad f(0) = \frac{2}{3}$$

$$\text{الف) } \left\{ \left(\frac{1}{2}, 2 \right) \left(\frac{3}{2}, -1 \right) (2, 2) \left(-\frac{1}{2}, 6 \right) \right\} \quad \text{③}$$

$$\left\{ \left(\frac{1}{2}, 2 \right) \left(\frac{3}{2}, -1 \right) (2, 2) \left(-\frac{1}{2}, 6 \right) \right\}$$

$$\text{ب) } \left\{ (\pm 1, 2) (\pm \sqrt{3}, -1) (\pm 2, 2) \right\} \quad \left\{ (-1, 2) (1, 2) (\sqrt{3}, -1) (-\sqrt{3}, -1) \right. \\ \left. (2, 2) (-2, 2) \right\}$$

$$\text{ج) } \left\{ (-2, 19) (1, 3) (3, 9) (-1, 1) \right\}$$

$$\text{د) } \left\{ (1, -4) (3, -1) (-1, \frac{1}{2}) \right\} \Rightarrow \left\{ (1, -4) (3, -1) \right\}$$

$$h = \left\{ (2, 5) (3, 5) (-2, 6) \right\} \quad \text{④}$$

$$g(x) + 1 = 1 \quad \text{if } x \notin \mathbb{Z}$$

$$D\left(\frac{f}{g+1}\right) = D_f \cap D_g \quad \text{خطای که رخ می دهد}$$

$$D_{\frac{f}{g+1}} = \{0, 1, 2\} \quad \text{⑤}$$

$$D_f = 3x \geq 0 \Rightarrow x \geq 0 \quad \sqrt{3x-x} \geq 0 \Rightarrow M \Rightarrow x \neq 2 \quad \frac{0}{+} \rightarrow +$$

$$P(1) = \sqrt{10 - 1 - 9} = 0 \quad P(r) = \sqrt{10 - r^2 - r^2} = \sqrt{r} \quad (4)$$

$$P(r) = \sqrt{10 - 17 - r^2} = 0 \quad P(2) = \sqrt{10 - 16 - 4} = 0$$

$$h = \left\{ \left(\frac{1}{r}, \frac{r}{r} \right) \left(2, \frac{\sqrt{r}}{r} \right) \left(r, \frac{0}{r} \right) \right\} \Rightarrow h = \left\{ (1, 0) \left(2, \frac{\sqrt{r}}{r} \right) (r, 0) \right\}$$

$$x^r - r^2 x^r + r^2 x \xrightarrow{-1} y - 1 = (x - 1)^r \quad (5)$$

$$x = \sqrt[r]{y - 1} + 1 \Rightarrow y - 1 \in \mathbb{R} \Rightarrow R = \mathbb{R}$$

$$y = \frac{1}{x^r - r^2} \Rightarrow y n^r - r^2 n y - 1 = 0 \quad x_{1,2} = \frac{+r^2 y \pm \sqrt{r^4 y^2 - 4(-1)y}}{r^2 y}$$

$$r^4 y^2 + r^4 y > 0 \Rightarrow y(y + 1) > 0 \quad \begin{array}{c} -1 \\ + \quad - \quad + \end{array} \quad y \neq 0$$

$$R_f = (-\infty, -1] \cup (0, +\infty)$$

(A)

$$(a) \quad \frac{f}{r} = r \quad c - 1 + 10 = 9 \quad [9, +\infty)$$

$$(b) \quad \frac{-9}{-r} = r \quad -9 + 18 + c = 17 \quad (-\infty, 17]$$

$$(c) \quad \frac{f}{r} = r \quad f - 1 - c = -1 \quad \sqrt{[-19 + \infty]} \Rightarrow [0, +\infty)$$

$$(d) \quad \frac{-9}{-r} = r \quad -9 + 18 = 9 \Rightarrow [0, 9]$$

(B)

$$(a) \mathbb{R} \quad (b) \mathbb{R} \quad (c) [0, +\infty) \quad (d) [0, +\infty)$$

(C)

$$(a) \quad R_f = \mathbb{R} - \{r\}$$

$$(b) \quad R_f = \mathbb{R} - \{r\}$$