

نام و نام خانوادگی زهره میزبان پاسخنامه تشریحی تکلیف شماره کلاس (هم رفته) B

الف $\sqrt{\frac{x-1}{x}} - \frac{x}{x-1} \geq 0 \Rightarrow \frac{x^2-1-2x-x^2}{x(x-1)} \cdot \frac{1-2x}{x(x-1)} \cdot \frac{1}{1-1+1} = \frac{1}{x(x-1)}$ $D_f = (-\infty, 0) \cup [\frac{1}{2}, +\infty)$

ب $\frac{1}{x+1} - \frac{2}{x} \geq 0 \Rightarrow \frac{x - 2(x+1)}{x(x+1)} = \frac{-x-2}{x(x+1)} \geq 0 \Rightarrow \frac{x+2}{x(x+1)} \leq 0$ $D_f = \mathbb{R} - \{-2, -\frac{2}{3}, -1, 0, 1\}$

الف $\sqrt{\left(\left(\frac{1}{x}\right)^2 - 9\right)(32-4^x)} \geq 0 \Rightarrow \frac{-2}{1-1+1} = -2$ $D_f = (-\infty, -2] \cup [\frac{5}{2}, +\infty)$

ب $\sqrt{x-1} + \sqrt{y+1} = 3 \Rightarrow \sqrt{x-1} < 3 \Rightarrow 1 \leq x \leq 12$ $D_f = [1, 12]$

$\log_f(x^2-x-2) \rightarrow (x-2)(x+1) > 0 \rightarrow \frac{-1}{1-1+1} = -1$ ①

$\sqrt{x^2-1} + 1 \geq 0 \Rightarrow \frac{-1}{1-1+1} = -1$ ② $D_f = (-\infty, -1) \cup (2, +\infty)$

$x^2-1 \geq 0 \Rightarrow \frac{-1}{1-1+1} = -1$ ③

$\sqrt{3+ax-x^2}$ if $x = -2 \rightarrow \sqrt{1-2a} \rightarrow a = -\frac{1}{2}$

ضرب $\frac{c}{a} = -\frac{3}{f} \rightarrow -\frac{3}{f} \div (-\frac{1}{2}) = \frac{6}{f} = b$

$a+b = \frac{3}{2} - \frac{1}{2} = 1$

$\frac{1}{x+3-x} \cdot \frac{1}{3x-2-x} = \frac{1}{x+3} \cdot \frac{1}{2x+2} = \frac{-2}{-1+1} = -2$

$[-2, 1) \cup [1, +\infty) = [-2, +\infty)$

$$Pf(a) = f(1-p) + a$$

$$P(a+1)(v) = Pa - f + a$$

$$1fa + 1f = fa - f$$

$$a = -1, 1$$

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$$f(p-\sqrt{p}) + f(p+\sqrt{p}) = \sqrt{p-\sqrt{p}} + \frac{1}{\sqrt{p-\sqrt{p}}} + p + \sqrt{p+\sqrt{p}} + \frac{1}{\sqrt{p+\sqrt{p}}} + p$$

$$f + p\sqrt{p+\sqrt{p}} + p\sqrt{p-\sqrt{p}}$$

$$\downarrow$$

$$p(\sqrt{p+\sqrt{p}} + \sqrt{p-\sqrt{p}}) = p\sqrt{4} + f$$

$$A \rightarrow A^p = 4$$

$$\downarrow$$

$$1, 0$$

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$$Pf(x) - Pf(-x) = f x^r - x \rightarrow Pf(x) - Pf(-x) = 12x^r - px$$

$$Pf(-x) - Pf(x) = f x^r + x \rightarrow Pf(-x) - Pf(x) = 12x^r + px$$

$$-2f(x) = 10x^r + x$$

$$f(x) = -5x^r - \frac{x}{2}$$

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$$Pf(0) = 3m - 1 \rightarrow \text{if } x = 0 \rightarrow Pf(0) = 4m - 3$$

$$Pf(0) = 5m - 15 \rightarrow \text{if } x = -2$$

$$4m - 3 = 5m + 15 \rightarrow m = \frac{12}{1} = \frac{9}{4}$$

$$Pf(0) = \frac{9}{4} \times 2 - 1 = \frac{9}{2} \rightarrow f(0) = \frac{9}{2} = 4, 1/2$$

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$$Pf(-1) = \frac{3+12+3}{-1} = -18 \rightarrow f(-1) = -9$$

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