

نام و نام خانوادگی آریین زبانی پاسخنامه تشریحی تکلیف شماره ۷۷ ... کلاس ... دهم ... A

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

$\downarrow$ $\downarrow$
 $x=0$ $x=-\infty, 1, \infty$

$$Df = [-\infty, 0] \cup [1, \infty]$$

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$$y = \sqrt{\frac{-x}{f(x)}} \rightarrow x \leq 0$$

$\downarrow$
 $x=0, -2, 2, \infty$

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

$$Df = (-\infty, 0) \cup (0, 2)$$

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$$f(2) - 2f(2) = \varepsilon - \delta + \varepsilon, 2 \rightarrow -f(2) \leq 2 \rightarrow f(2) \geq -2$$

$$f(-2) + \varepsilon \leq 1 \varepsilon \rightarrow \boxed{f(-2) \leq 1}$$

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$$f(f(4)) + f(f(1)) = ?$$

$\downarrow$ $\downarrow$
 $4\sqrt{4} = 8$ $f(4) = 8$
 $f(8) = 9$

$7 + 9 = 16$

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$$a(n-1)^2 - b(n-1) + 2 - an^2 + bn - 2 = 4n + 2$$

$$an^2 + a - 2an - b + 2 - an^2 + bn - 2 = 4n + 2$$

$$a + b - 2an = 4n + 2$$

$\downarrow$ $\downarrow$
 $2 + b = 4 \rightarrow \boxed{b=2}$ $2a = 4 \rightarrow \boxed{a=2}$

$a-b = -1 \rightarrow \boxed{-1}$

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$\frac{r f(r) + f(-1)}{f'(r)} = ? \quad f(r) = 1$ $\frac{r + 0}{1} = \textcircled{r}$ $f(-1) = 0$ $f(r) = -1$	6
$\frac{r f(r) - r f(-r)}{f(r)} = ? \quad \frac{r \cdot 9 - 1}{r} = \textcircled{\frac{r1}{r}}$ $f(r) = 1^r$ $f(-r) = -1$ $f(r) = r$	7
$\frac{f(f(r)) - f(f(r))}{f(1) - r} \quad f(r) = r = \frac{r - r}{r} = \frac{0}{r} = \textcircled{\frac{0}{r}}$ $f(r) = r$	8
$f(x) = \frac{x^r + 8x + 4}{x^r + 8x + 0}$ $f(\sqrt{r} - r) = \frac{(\sqrt{r} - r)^r + 8(\sqrt{r} - r) + 4}{(\sqrt{r} - r)^r + 8(\sqrt{r} - r) + 0}$ $\frac{f(\sqrt{r} - r)}{f(r)} = \frac{(\sqrt{r} - r)^r + 8(\sqrt{r} - r) + 4}{(\sqrt{r} - r)^r + 8(\sqrt{r} - r) + 0} = \textcircled{\frac{r1}{14}}$ $f(r) = 1$	9
$f(x) = x^r + \frac{1}{x^r}$ $\left(x + \frac{1}{x} \right)^r = x^r + \frac{1}{x^r} + r$ $x^r + \frac{1}{x^r} - x^r - \frac{1}{x^r} + r = \textcircled{r}$ $f(\sqrt{x}) = x + \frac{1}{x}$	10