

$$\frac{r f(r) - f(-1)}{f'(r)} = \frac{r + \Delta}{1} = r$$

$$r = 10$$

$$(10)^r - 10 \times 10 + 1 = 1$$

$$f(-1) \Rightarrow \lambda = -1$$

$$(-1)^r - 10(-1) + 1 = \Delta$$

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

$$f(-1) = \Delta$$

(2) ✓

$$\frac{r f(r) - r f(-r)}{f(r)} = \frac{\cancel{r} \Delta}{\cancel{r}} = \frac{\cancel{r} \Delta}{\cancel{r}}$$

1, 2

$$n = \Sigma$$

$$r \times \Sigma + 1 = 10$$

$$n = -r \rightarrow n < r$$

$$(-r)^r = \cancel{r}$$

$$f(r) \rightarrow r \times r + 1 = r$$

$$\frac{f(f(r)) - f(f(r))}{f(1) - r} = \frac{0}{\Sigma}$$

(2) ✓

$$(n+r)^r = n^r + \Sigma n + \Sigma$$

$$\frac{(n+r)^r + \Delta}{(n+r)^{r+1}} = \frac{(\sqrt{r})^r + \Delta}{(\sqrt{r})^{r+1}}$$

(2) ✓

$$\frac{r + \Delta}{r + 1} = \frac{\Delta}{\Sigma} = r$$

$$\frac{(\Sigma)^r + \Delta}{(\Sigma)^{r+1}} \rightarrow \frac{r \Delta}{10}$$

$$n^r + \frac{1}{n^r} + r \rightarrow \left(n + \frac{1}{n}\right)^r$$

$$\left(n + \frac{1}{n}\right)^r - r$$

$$f(n) \rightarrow \left(\frac{n^r + 1}{n}\right) - r$$

$$f(\sqrt{n}) \rightarrow \left(\left(\frac{n+1}{\sqrt{n}}\right)^r - r\right)^r$$

(2) ✓

$$\left(n + \frac{1}{n}\right)^r - n^r - \frac{1}{n^r} = r$$

$$\underbrace{\left(n + \frac{1}{n}\right)^r - n^r}_{n^r + \frac{1}{n^r} + r}$$

کلاس: دهم ریاضی

11, 1, 2

تکلیف شماره 1

نام خانوادگی: ...

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

$$y = \sqrt{x} \Rightarrow x = y^2$$

$$f(x) = 0 \Rightarrow x = 0$$

$$f(x) < 0 \Rightarrow x < 0$$

$$f(x) > 0$$

$$x = -4$$

$$f(x) = 0 \Rightarrow x = 0$$

$$D_f = [-4, 0] \cup [1, 4]$$

x	$f(x)$	x	$f(x)$
-	+	-	+
+	-	-	-
-	-	+	+
+	+	+	+

$$y = \sqrt{-x}$$

$$f(x) = 0$$

$$f(x) \neq 0 \Rightarrow x \neq 0$$

$$x = -4, x = 0, x = 4$$

$$f(x) < 0 \Rightarrow x < 0$$

$$f(x) > 0 \Rightarrow x > 0$$

$$f(x) < 0 \Rightarrow x < 0$$

$$f(x) > 0 \Rightarrow x > 0$$

$$D_f = [-4, 0] \cup (0, 4]$$

$$f(x) - f(1) = x - 1 + \epsilon$$

$$f(-1) = 0$$

$$f(-1) - f(1) = 0 - 1 + \epsilon$$

$$f(-1) = 1$$

$$f(1) - f(1) = 1 - 1 + \epsilon$$

$$-f(1) \geq 1 \Rightarrow f(1) = -1$$

$$f(1) \rightarrow x = 1$$

$$1 \times 1 + 3 = 4$$

$$f(4) \Rightarrow x = 4$$

$$4 - \sqrt{4 + \epsilon} \Rightarrow 4 - \sqrt{9} = 4 - 3 = 1$$

$$f(1) \Rightarrow x = 1$$

$$1 \times 1 + 3 = 4$$

$$f(1) = 4$$

$$f(4) = 7$$

$$f(1) = 1$$

$$1 + 3 = 4$$

$$f(x) = ax^2 - bx + c$$

$$f(n-1) - f(n) = 4n + 2 \quad a - b = ?$$

$$f(n-1) = a(n-1)^2 - b(n-1) + c$$

$$(1)$$

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

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

$$a + b = -4$$

$$-2a + b = -2$$

$$-2 \times 5 = -10$$

$$a - b = -2$$

$$\begin{cases} -2a = 4 \rightarrow a = -2 \\ a + b = 2 \rightarrow b = 4 \end{cases} \Rightarrow a - b = -6$$