

in

جاءني في حليمه و (م) له اسم دامت يا صفر

$$[-\omega, 0] \cup [r, \omega]$$

$$f(x) > 0, \quad x < 0$$

$$(-3, 0) \cup (0, 2)$$

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1, →

54}

$$L(x) - Y(-2) = x^2 - 12x + 6$$

$$L(x) = x^2 - 3x$$

$$f(-2) = 5 + 5 \Rightarrow f(-2) = 10$$

$$f(L(u)) + f(L(v)) = v + r = 9$$

$$\textcircled{1} f(\omega) = \omega - \sqrt{9} = 0 - 3 = -3$$

$$J(Y) = Y \times Y + Y = \underline{V}$$

$$f(\omega) = \underline{\tau}$$

Q ✓

$$\textcircled{1} \quad I(n+1) = a(n+1) - b(n+1) + r$$

$$d(n-1) = a n^r + a - r a x - b x + b + r$$

$$f(x-1) - f(x) = \cancel{ax^2} + a - \cancel{cax} - \cancel{bx} + \cancel{b} - \cancel{ax^2} + \cancel{bx} =$$

② - $r_a = 4$

$$a = -\mu$$

$$\leftarrow a - 2ax + b = 4x + 7$$

③ $-r a + b = r$

$$a - b = -1 \quad c = -1$$

① $L(\mu) = 9 - 9 + 1 = 1$

② $f(-1) = 1 + 3 + 1 = 5$

③. $L(r) = r - 4 + 1 = -1$

$$\frac{r + \omega}{1} = v \quad \text{--- (2)}$$

(V)

$$f(x) = \begin{cases} x^2 + 1 & x \geq 2 \\ x^2 & x < 2 \end{cases}$$

$$\textcircled{1} f(2) = 2^2 + 1 = 5$$

$$\textcircled{2} f(1) = 1^2 = 1$$

$$\frac{f(2) - f(1)}{f(2)} = \frac{5 - 1}{5} = \frac{4}{5} = \frac{4}{5}$$

(A)

$$\frac{f(f(2)) - f(f(1))}{f(1) - f(2)} = \frac{f(5) - f(1)}{1 - 5} = \frac{25 - 1}{-4} = -6$$

(9)

$$f(x) = \frac{x^2 + 4x + 9}{x^2 + 4x + 4} = \frac{(x+2)^2 + 5}{(x+2)^2} = 1 + \frac{5}{(x+2)^2}$$

$$f\left(\frac{1}{\sqrt{x} - 2}\right) = ?$$

$$f(2) = \frac{9 + 12 + 9}{9 + 12 + 4} = \frac{30}{25} = \frac{6}{5}$$

(10)

$$f(x) = x^2 + \frac{1}{x^2}$$

$$f(\sqrt{x}) = (\sqrt{x})^2 + \frac{1}{(\sqrt{x})^2} = x + \frac{1}{x} \xrightarrow{\text{Put } x = 2} \left(2 + \frac{1}{2}\right)^2 = \frac{25}{4}$$

$$(f(\sqrt{x}))^2 - f(x) \rightarrow \left(2 + \frac{1}{2}\right)^2 - \left(2 + \frac{1}{2}\right) = \frac{25}{4} - \frac{5}{2} = \frac{15}{4}$$

(V)

$$f(\sqrt{x} - 2) = \frac{(\sqrt{x} - 2 + 2)^2 + 5}{(\sqrt{x} - 2 + 2)^2 + 1} = \frac{5}{5} = 1$$

$$f(f(\sqrt{x} - 2)) = f(1) = \frac{(1+2)^2 + 5}{(1+2)^2 + 1} = \frac{10}{10} = 1$$