

بہ نامہ خدا

Q

①

$$b = a + 1 \implies$$

δ

$$\frac{-a}{\sqrt{e}}$$

③

②

$m = 1$ (تک)

Q

Subject :

Year. Month. Date. ()

$$-a + 10a + a = 10a + a = 11a$$

$$\left. \begin{aligned} f'(x) &= -a \\ f(x) &= -10a - a \end{aligned} \right\} \rightarrow 11a = -11 \quad a = -1 \quad (2)$$

$$\frac{f(x)}{f'(x)} = \frac{\frac{1}{x} - a}{-a} = \frac{\frac{1}{x} - (-1)}{-(-1)} = \frac{\frac{1}{x} + 1}{1} = \frac{1+x}{x} \quad (1)$$

$$g'(x) = -\frac{1}{x^2} (2x-1)^{-\frac{1}{2}} \times 2x = -\frac{1}{x^2} (2x-1)^{-\frac{1}{2}} \quad (1)$$

$$(f \circ g)'(\frac{1}{\sqrt{2}}) = g'(\frac{1}{\sqrt{2}}) \times f'(g(\frac{1}{\sqrt{2}})) = 1 \quad g(\frac{1}{\sqrt{2}}) = \frac{1}{\sqrt{2}}$$

$$g'(\frac{1}{\sqrt{2}}) \times f'(1) \quad [x^2 + \frac{1}{x}] \xrightarrow{x=1} = 2 \quad f(x) = (x^2 + \frac{1}{x})^2 + 1$$

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

$$g'(x) = -\frac{1}{x^2} (2x-1)^{-\frac{1}{2}}$$

$$g'(\frac{1}{\sqrt{2}}) = -\sqrt{2}$$

$$= \frac{1}{x} \times \frac{1}{x^2}$$

$$= \frac{-\sqrt{2}}{\sqrt{2}} = -1 = -\frac{1}{\sqrt{2}} = -\frac{1}{\sqrt{2}} \times \sqrt{2} = -1$$

$$y' = g'(\frac{1}{\sqrt{2}}) f'(1) = -\sqrt{2} \times 2 = -2\sqrt{2} \rightarrow \text{برابر}$$

$$g'(x) = f'(x+1) = 2f'(x+1)$$

$$g'(-1) = f'(-1) + 2f'(1)$$

$$-1 + 2 = 1 \quad (1)$$

$$g'(-1) = \frac{1}{x} + \frac{1}{x^2} = 1$$

$$(2)$$

$$f'(-1) = f'(1) = \frac{1}{x}$$

$$f(a-h) = t \quad \frac{t^2 - 1}{h(a-h)} = \frac{(t-1)(t+1)}{h(a-h)} \quad \frac{(f(a-h)-1)}{a-h} \times \frac{f(a-h)+1}{h} \quad (9)$$

$$\frac{-f'(a)}{a} = -\frac{a}{1}$$

$$(2)$$

$$f(x) = 3x + 1$$

$$y = \frac{1}{x} + 1 \quad (1, 2)$$

$$m = \frac{1}{x} \rightarrow -1$$

$$y - 2 = -1(x - 1)$$

$$(10)$$