$f(x) = -ax - 5$ $\longrightarrow a = -\frac{3}{2}$

$\hookrightarrow f'(3) - f(3) = 2 \rightarrow -a + 3a + 5 = 2 \rightarrow 2a = -3$ ۶

$\rightarrow f(x) = +\frac{3}{2}x - 5 \rightarrow f'(3) = \frac{3}{2}$, $f(3) = \frac{9}{2} - 5 = -\frac{1}{2} \rightarrow \frac{f(3)}{f'(3)} = \frac{-\frac{1}{2}}{\frac{3}{2}} = -\frac{1}{3}$

$f(x) = \left(x\left[x^2 + \frac{1}{2}\right]\right)^2 + 1 \rightarrow f(g(x)) \rightarrow \left(\frac{1}{\sqrt[3]{x^2-1}}\left[4 + \frac{1}{2}\right]\right)^2 + 1$

$g(x) = \frac{1}{\sqrt[3]{x^2-1}}$ ۷

$\rightarrow \left(\frac{4}{\sqrt[3]{x^2-1}}\right)^2 + 1 \rightarrow \frac{8 \times 2x}{3(\sqrt[3]{x^2-1})} \cdot 2\left(\frac{4}{\sqrt[3]{x^2-1}}\right)$

$\rightarrow -\frac{16 \times \frac{3}{\sqrt{8}}}{3 \times \frac{1}{2}} \times \frac{4}{\frac{3}{2}} = -8\sqrt{8} \times 8 = 64\sqrt{8} \longrightarrow -\frac{64\sqrt{8}}{128\sqrt{8}} = -\frac{1}{2}$

$f'(-1) = \frac{3}{2}$ $\quad T = 5 \rightarrow f(-1) = f(4)$, $f'(-1) = f'(4)$

$g(x) = f(x+1) + f(3x+10) \rightarrow f'(x+1) + 3f'(3x+10)$ ۸

$g'(-2) = ? \rightarrow f'(-1) + 3f'(4) \rightarrow \frac{3}{2} + \frac{9}{2} = \frac{12}{2} = 6$

$f(x) = (x-4)\sqrt[3]{x+3} \rightarrow f(5) = 2$

$\lim_{h \to 0} \frac{f^2(5-h) - 3f(5-h) + 2}{h(5-h)} \rightarrow \frac{(f(5-h) - 1)(f(5-h) - 2)}{h(5-h)}$ ۹

$f'(5)\frac{(f(5-h) - 1)}{(5-h)} = -\frac{25}{12} \times \frac{1}{5} = -\frac{5}{12}$

$4y - 2x = 1 \rightarrow 4y = 2x + 1 \rightarrow y = \frac{1}{2}x + \frac{1}{4} \rightarrow y = -2x + 5$

$y = x^2 - 4x + 5 \rightarrow 2x - 4$ $\quad \rightarrow -2x = 2x - 4 \rightarrow x = 1$ ۱۰

$A \begin{vmatrix} 1 \\ 2 \end{vmatrix}$