نام و نام خانوادگی ..امیرعلی رنجبر.. پاسخنامه تشریحی تکلیف شماره ۲۷ .. کلاس ..دوازدهم B..

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$f'(x) = 3\cos^2(2x) \times (-2\sin(2x)) + 2ax$

$f''(0) = 2 = -12 + 2a$

$a = 6$

$f(0) = 0 \Rightarrow 1 + b = 0 \Rightarrow b = -1$

$a + b = 6 - 1 = 5$

$f''(x) = -12\sin(2x)\cos(2x)(-2\sin(2x)) + (-4\cos(2x))(3\cos^2(2x)) + 2a$

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$a \,|\, \alpha,\ \alpha^2 - 1 \quad , \quad b \,|\, \beta,\ \beta^2 - 1$

$\frac{\alpha + \beta}{2} = \frac{-b}{2a} = 0 \Rightarrow \alpha = -\beta$

$\rightarrow a \,|\, \frac{1}{2},\ -\frac{3}{4} \qquad \rightarrow b \,|\, -\frac{1}{2},\ -\frac{3}{4}$

$2\alpha = \frac{-1}{2\beta}$

$\beta = \frac{1}{4\beta} \Rightarrow \beta = \pm\frac{1}{2}$

$(-\frac{3}{4}) \times 2 = -1.5$

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شیب خط مماس: $\frac{18}{3} = 6$

معادله خط مماس $= 6x - 9$

$6x - 9 = \frac{a}{2x-1} \Rightarrow a = 12x^2 - 24x + 9$

$6 = \frac{-2a}{(2x-1)^2} \Rightarrow a = -9x^2 + 12x - 3$

$\Rightarrow 18x^2 - 36x + 12 = 0$

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

$f(x) = \frac{x - \frac{1}{3}}{-\frac{1}{3}x + 1}$

$a - b = \frac{4}{3}$

$f(1) = \frac{\frac{2}{3}}{\frac{2}{3}} = 1$

$f'(1) = 2 \Rightarrow \frac{1 - a^2}{(a+1)^2} = 2 \Rightarrow 1 - a^2 = 2a^2 + 4a + 2$

$y(1) = 2 + b \Rightarrow b = -1$

$3a^2 + 4a + 1 = 0 \rightarrow a = -1$ (غ ق ق، از تابع ثابت → y = ...)، $a = -\frac{1}{3}$

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$\sin x + \frac{1}{2}\cos x = \frac{3}{2}\sin x$

$\cos x = \sin x \Rightarrow x = \frac{\pi}{4}$

$y = \frac{\sqrt{2}}{4}x + b \quad a\,|\,\frac{\pi}{4}, \frac{3\sqrt{2}}{4} \Rightarrow b = \frac{-\pi\sqrt{2}}{16} + \frac{3\sqrt{2}}{4}$

طول از مبدا خط: $\frac{\pi}{4} - 3$

$f'(x) = \cos x - \frac{1}{2}\sin x \rightarrow f'(\frac{\pi}{4}) = \frac{\sqrt{2}}{2} - \frac{\sqrt{2}}{4} = \frac{\sqrt{2}}{4}$

$f(\frac{\pi}{4}) = \frac{3\sqrt{2}}{4}$

$f'(x) = 9x^2 - 9x - 12 \rightarrow 9x^2 - 9x - 12 = -9$

$3x^2 - 3x - 1 = 0 \rightarrow \Delta > 0 \Rightarrow$ دو نقطه

A	-1	$m_{AB} = \frac{8+19}{-1-2} = -9$
B	2	
	-19	

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$f'(x) = 3kx^2 + 2kx + 2x$

$\Delta > 0 \Rightarrow -6k^2 + 8k + 4 > 0$

$S < 0 \Rightarrow \frac{-2k-2}{2k} < 0$

	$-\frac{1}{3}$		0	
	−	+	∄	−

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$-4 = -1 + a - b - 1 \Rightarrow a - b = -2$

$f'(x) = 3x^2 + 2ax + b$

$f'(-1) = 0 \Rightarrow 3 - 2a + b = 0 \Rightarrow b - 2a = -3$

$\Rightarrow a = 5$, $b = 7$

$\frac{a}{b} = \frac{5}{7}$

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$C = 4$

$3x^2 + 2ax + b = f'(x)$

$f'(1) = 0 \Rightarrow b = 0$

$S = \frac{-2a}{3} \Rightarrow \alpha = \frac{-2a}{3}$, $\beta = 0$

$f(\frac{-2a}{3}) = \frac{-8a^3}{27} - \frac{2a^3}{3} + 4 = 0$

$-54a^3 + 108 = 0$

$\frac{-54a^3}{27} + \frac{108}{27} = 0$

$2a^3 = 8$

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