$f(x) = a(x-5) + b(x+5)$

$\lim\limits_{x \to 5^+} = \lim\limits_{x \to 5^-}$

$+ \quad - \quad +$

$f(x) = 3x^4 - 2x^3 - 6x^2 + 6x + 1$

$= 3x^4 - 2x(x^2 + 3x + 3) + 1$

P5 O3 R3

[illegible] $= \frac{3}{11}$

[illegible] $= \frac{3}{11}$

$x_1 + 2x_2 + 2x_3 = 4$ $\quad 2(x_2 + x_3) = 4 - x_1$

$x_1 + 2(x_2 + x_3) = 4$

$2x_1 - 2x_2 - x_3 = -3$

$2x_1 - (2x_2 + x_3) = -3$

$4x_1 + x_2 + 2x_3 = 3$

$4x_1 + (x_2 + 2x_3) = 3$

$7x_1 + x_2 + 3x_3 = 4$

$C = 6x_1 - x_2 + x_3$

$6x_1 = x_2 - x_3$

$12x_1 = (x_2 - x_3)2$

$$f(x) = a[x+5] + b[x-5]$$

$$\lim_{x \to 5^+} = \lim_{x \to 5^-}$$

$$a(10) + b(0) = a(9) + b(-1)$$

$$a = -b$$

C

$f(x) = 3x^4 - 2x^3 - 6x^2 + 6x + 1$

$3x^4 - 2x^3 - 15x^2 + 9x^2 + 6x + 1$

$2x^4 + (x^4 - 2x^3 - 15x^2) + (3x+1)^2$

$2x^4 + x^2(x-5)(x+3) + (3x+1)^2$

-60

$32 + (4)(-3)(5) + 49$

$11 + 21 = 21$

$3x^4 - 2x - 15$ $\times 5$

$48 - (16) - (24) + 12 + 1$

$60 - 40 +$

$P = 5$

$R = 3$

$C = 3$

$2b+2c$

① $a + 2b + 2c = 4$ $\quad 2(b+c) = 4$

② $2a - 2b - c = -3$ $\quad 2b + c = 3$

$2a - (2b+c)$

$c = 1$

③ $4a + b + 2c = 3$

$4a + b + 2c + 1 = a + 2b + 2c$

$3a + 1 = b$

$9a + 3 = 3b$

$9a + 3 = 8a + 3$

$a = c$

$4a - b + c = 0$

$8a - 3b = -3$

$4a = 3b - 3$

$8a = 3(b-1)$

$$f'(x) = \frac{f(x_i) - 0}{x_i - x_{i+1}}$$

$$x_{i+1} = x_i - \frac{f(x_i)}{f'(x_i)}$$

$$x_{k+1} = x_k \left(\frac{x_k^3 - 5x + 7}{3x_k^2 - 5} \right)$$

$$= \frac{3x^3 - 5x - (x^3 - 5x + 7)}{3x_k^2 - 5}$$

$$= \frac{2x^3 - 7}{3x_k^2 - 5}$$

$$\frac{x\,dy - y\,dx}{x} = \cos 2\left(\frac{y}{x}\right) dx$$

$$x_1 = x_0 f(x_0)$$

$$A \begin{bmatrix} 4 & 6 \\ 3 & 7 \end{bmatrix} \quad \frac{7}{15}$$

$$B \begin{bmatrix} 4 & 8 \\ 8 & 10 \end{bmatrix} \quad \frac{10}{14}$$

$$\frac{x\,dy - y\,dx}{x^2}$$

$$\text{Q. } \frac{d\left(\frac{y}{x}\right)}{dx} = \cos 2\left(\frac{y}{x}\right) dx$$

$$\frac{d\left(\frac{y}{x}\right)}{dx} = \frac{1}{x} \cdot \cos 2\left(\frac{y}{x}\right) dx$$

$$dy - \frac{y}{x}dx = \cos^2\left(\frac{y}{x}\right)dx$$

$$x = (a - by)\left(\frac{x^2}{2}\right)$$

$$y = (dx - c)\left(\frac{y^2}{2}\right)$$

$$y \propto \frac{1}{c}$$

$$x \propto c$$

2 , 3 , 5

✓ ✓ ×

$\Sigma F = 0$

ΣF

$\omega = \frac{d\theta}{dt}$

$\omega dt = d\theta$

$\omega \int dt = \int d\theta$

$\alpha = \frac{v^2}{r}$

$= \omega^2 r$

$\alpha = \frac{\theta^2}{t^2} r$

$\frac{\alpha}{r} = \frac{d^2\theta}{dt^2}$

$\alpha dt^2 = r d^2\theta$

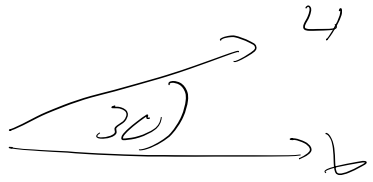
75 kg

$mv = mc\Delta t$

$m(150) \cdot 40 = (45)(500)(0.24)$

$5040m = 120$

$m = \frac{12}{5040} = \frac{1}{420}$



$A \times B = 4 \times b \times \frac{1}{2}$

$= 12$

$x = 3\cos(2t - 4)$

$v = 4$

$t = 2 \qquad x = 3\cos 0$

$x = 3$

$v = 8$