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Set: A

$$1. \left[ \begin{array}{ccc|c} 2 & 3 & -5 & 9 \\ 0 & 2 & 5\lambda & 4 \\ 0 & 0 & 3\lambda+6 & 2\lambda \end{array} \right] \Rightarrow \lambda = -2, \mu \neq 0$$

$$2. f(x) = 5x^4$$

$$a_0 = \frac{1}{2} \int_{-2}^2 x^4 = \frac{5}{2} \left[ \frac{x^5}{5} \right]_{-2}^2 = \frac{5}{2} \cdot \frac{1}{5} x^5 \Big|_{-2}^2 = \frac{32-32}{2} = 0$$

$$3. D = 2(3-4) - 3(-2) + (-2)(4-1) = -2 + 12 - 12 = -2$$

$$x = 1, y = 1, z = 1$$

$$4. f(x) = x^9 \sinh x, f(-x) = -x^9 \sinh x$$

$$5. f(x) = \frac{x^9}{\cos x}, f(-x) = \frac{x^9}{\cos x}$$

$$6. \left[ \begin{array}{ccc|c} 1 & 1 & 6 & 6 \\ 0 & 1 & \lambda & 4 \\ 0 & 0 & \lambda+3 & \lambda-2 \end{array} \right] \Rightarrow \lambda = -3, \mu = 2$$

$$7. D = 1(-4-1) - 2(8-3) - 3(-2-3) = -5 - 10 + 18 = 3$$

$$D_2 = 1(0) - 2(0) + 4(-2-3) = -20$$

$$8. \tan x = \tan \pi$$

$$\tan 3x = \tan \pi$$

$$x = \frac{\pi}{3}$$

$$9. x_4 + x_5 = 600 + 400 = 1000$$

$$10. a_0 = 0 \text{ [odd]}$$

$$10. \text{period} = 8$$



$$11. x - 4y - 2z = 3$$

$$-x + 2y - z = 2$$

$$2x - 4y + 2z = 1$$

$A^{-1}$  is not possible

$\therefore$  So  $A^{-1}B$  not possible

$$|A^{-1}| = 0$$

$\therefore$

This is inconsistent