"If f(x) = 2x^3 - 3x^2 + 4x - 5, find f'(x)." "Solve for x: log2(x) + log2(x-2) = 3." "Evaluate the integral: ∫ (3x^2 - 2x + 1) dx."

"Find the determinant of the matrix: [[2, 3], [4, 5]]."

"If the sum of an arithmetic series is 150 and the first term is 5, find the common difference given 10 terms."

"Find the limit: lim (x->0) (sin 5x / x)."

"If A and B are independent events with P(A) = 0.4 and P(B) = 0.5, find P(A ∩ B)."

"Solve for x: e^(2x) - 5e^x + 6 = 0."

"Find the derivative of f(x) = ln(x^2 + 1)."

"Calculate the eigenvalues of the matrix: [[1, 2], [2, 3]]." "Solve the differential equation: dy/dx = y - x."

"Find the radius of convergence of the series Σ (n! / n^n) x^n." "Evaluate: ∫ (1 / (x^2 + 4)) dx."

"If z = 3 + 4i, find |z|."

"Solve for x: 2^x + 2^(x+1) = 48."

"Find the sum of the infinite geometric series with a = 3 and r = 2/3." "Determine if the function f(x) = x^3 - 6x^2 + 9x is concave up or down at x = 2." "Find the area enclosed by the curves y = x^2 and y = 2x."

"Find the volume of the solid generated by rotating y = sqrt(x) around the x-axis from x = 0 to x = 4."