

Problem 1

Find $\int x \sqrt[3]{x^2 + 1} dx$

Problem 2

Find $\int \sin^2(x) \cos(x) dx$

Problem 3

Find $\int \sin^2(x^2) \cos(x^2) 2x dx$

Problem 4

Find $\int \frac{x}{x^4 + 2x^2 + 1} dx$ (hint: factor)

Problem 5

Find $\int \sqrt[3]{x-3} x dx$