Answer on Question #70198 – Math – Calculus

Question

Integral d/dx(x² - x⁴/a²)

Solution

$$\int \left(x^2 - \frac{x^4}{a^2}\right) dx = \int x^2 dx - \frac{1}{a^2} \int x^4 dx = \frac{x^3}{3} - \frac{x^5}{5a^2} + C,$$

where C is an integration constant.

Answer: $\int \left(x^2 - \frac{x^4}{a^2}\right) dx = \frac{x^3}{3} - \frac{x^5}{5a^2} + C.$